#### MODULE OVERVIEW

Module 4 is the final practical exam for the NHTSA EMD training curriculum. You will demonstrate the proper and effective use of the knowledge that you have gained throughout this course.

The practical exam will assist the instructor(s) in determining your readiness for the job of emergency medical dispatcher. As a result, you will likely be asked to demonstrate proficiency in all areas of EMD in a comprehensive format. You should be prepared to deal with all thirty-two chief complaint types. You will be tested, however, on only sixteen "real-life" simulations. These scenarios are conducted between the instructor and you, or you may be asked to participate in acting out a scenario with another trainee as the instructor(s) observe you. The instructor will decide on which types of complaints you will be tested.

#### **MODULE OBJECTIVES**

Upon completion of this module, you will:

1. Demonstrate effective and proper EMD behaviors.

# MODULE 4 Practical Examination

Emergency Medical Dispatch: National Standard Curriculum

#### **EXAM OVERVIEW**

The NHTSA course practical examination will consist of simulated or scripted calls for emergency medical assistance. You will be assessed on 16 of the 32 chief complaint types.

You will be assessed on your knowledge and demonstration of the skills required for effective dispatch including:

- Proper telephone techniques;
- 2. Proper handling of difficult callers;
- 3. Proper use of EMDPRS to elicit dispatch information;
- 4. Proper use of the EMDPRS to allocate resources based on use of information gathered;
- 5. Proper identification of medical emergencies and
- 6. Proper delivery of medical instructions from the EMDPRS.

Simulations and scripted role plays will be based on actual 9-1-1 calls. Actual 9-1-1 calls will be used to develop these simulations. Transcriptions might be used when available and cost effective. In either case, caller identification information contained in the calls will be removed and replaced with false data to protect the identity of the callers.

#### **EXAM OBJECTIVES**

#### **Final Exam Terminal Objective**

Upon completion of this exam, you will be able to:

1. Demonstrate effective and proper EMD behaviors.

## **MODULE 4**

## Practical Examination Overview

## **GLOSSARY OVERVIEW**

This glossary contains terms that you may commonly hear in your work. Many of these terms are contained in this curriculum. Other medical and/or legal terms are included here, providing you with additional exposure to terms common in the industry, from terms that other EMDs may use to those used by ALS personnel and Physicians with which you will come into contact.

#### **GLOSSARY OF TERMS**

**a-, an-, ano-:** Prefix meaning without.

abandonment: A termination of a paramedic-patient relationship by the paramedic without consent of the patient and without care to the patient by qualified medical providers.

**ABC's:** Airway, Breathing and Circulation; the first three steps in the examination of any victim; basic life support.

**abdomen:** The large body cavity below the diaphragm and above the pelvis.

**abdominal:** Pertaining to the abdomen.

**abduct:** To draw away from the midline.

**abduction:** The act of abducting; the state of being abducted.

abnormal: Not normal; malformed.

**abortion:** The premature expulsion of the products of conception from the uterus; miscarriage.

incomplete abortion: The expulsion of part of the fetus, or of other parts of the products of conception, from the uterus before term.

missed abortion: Retention of the contents of the uterus after the fetus dies.

spontaneous abortion: An abortion occurring naturally. therapeutic abortion: An induced abortion, usually accomplished by qualified medical personnel under ideal conditions; the purpose is usually to preserve the life of the mother.

threatened abortion: The appearance of signs and symptoms of possible loss of the fetus; characterized by bleeding and cramps.

**abrade:** To wear away by mechanical action; to scrape away a substance.

**abrasion:** An injury consisting of the loss of a partial thickness of skin from rubbing or scraping on a hard, rough surface; also called a brush burn, friction burn.

abruptio placentae: A premature separation of a normally implanted placenta from the uterine wall usually occurring during the third trimester of pregnancy and accompanied by pain and bleeding.

**abscess:** A localized collection of pus in any part of the body; formed by disintegration of tissues and accumulation of white blood cells.

**absorbent:** Having the quality to attract another substance and incorporate it into its substance.

**absorption:** The act of absorbing; the passage of one material into another's internal structure.

**ac:** Abbreviation for *ante cibum,* meaning before eating.

**access:** A way or means of approach; the action of going to or reaching.

acetabulum: The cup-shaped cavity on the external surface of the innominate bone in which the rounded head of the femur fits.

acetic acid: The principal acid in vinegar.

acetone: A chemical compound found normally in small amounts in the urine; diabetic patients are said to produce a "fruity odor" when larger amounts are produced in blood and urine.

acid: Sour; a substance that forms hydrogen ions in solution and from which hydrogen may be displaced by a metal when a salt is formed.

acromioclavicular joint: The point of the shoulder; the junction (union) between clavicle and scapula plus the supporting ligaments.

**acromion:** The lateral, triangular, bony projection of the scapular spine forming the point of the shoulder with the lateral part of the clavicle.

activated charcoal: Powdered charcoal that has been treated to increase its powers of absorption; used in a slurry to absorb ingested poison.

**acute:** Having rapid onset, severe symptoms, and a relatively short duration.

acute abdomen: A serious, intraabdominal condition causing irritation or inflammation of the peritoneum, attended by pain, tenderness, and muscular rigidity (board-like abdomen).

acute myocardial infarction: The acute phase of a heart attack, wherein a spasm or blockage of a coronary artery produces a spectrum of signs and symptoms, commonly including chest pain, nausea, diaphoresis, anxiety, pallor, lassitude.

Adam's apple: The projection on the anterior surface of the neck, formed by the thyroid cartilage of the larynx.

**addiction:** The state of being strongly dependent upon some agent; drugs, tobacco, for example.

**adduct:** To move toward the center of the body, particularly a limb or head.

**adduction:** The act of adducting; the movement of a part toward the midline of the body.

adipose: Fatty tissue.

adjunct: An accessory or auxiliary agent or measure; an oropharyngeal airway is an airway management adjunct.

**ad lib:** Abbreviation for *ad libitum,* meaning as desired.

**adrenal:** Refers to the adrenal gland or its secretion.

**Adrenalin:** The proprietary name for epinephrine.

adrenergic: Activated by, characteristic of, or secreting epinephrine or other substances with similar activities (catecholaminic).

Advanced Life Support (ALS): Basic life support plus invasive techniques leading to definitive therapy to save the patient's life.

aerobe: An organism that lives and grows in the presence of free oxygen.

afebrile: Without fever.

**afferent:** Bearing or conducting inward.

affinity: Attraction.

**afterbirth:** The placenta and membranes expelled after the birth of a child.

**agglutination:** Clumping together of blood cells.

agonal: Pertaining to death or dying.

**agonist:** A prime mover; a muscle opposed in action by another muscle, called the antogonist.

air: The gaseous mixture which composes the Earth's atmosphere; composed of approximately 21 percent oxygen, 79 percent nitrogen, plus trace gases.

air chisel: A chisel attachment for devices powered by compressed air; used to cut away metal and other materials.

air cutter gun kit: An air powered tool for cutting that does not produce heat or sparks.

air embolism: The presence of air bubbles in the heart or blood vessels causing an obstruction.

**air hunger:** A term for labored breathing.

air passage: Any of several tubes that normally transmit air into the lungs.

air splint: A double-walled plastic tube that immobilizes a limb when sufficient air is blown into the space between the walls of the tube, to cause it to become almost rigid.

airway: An air passage.

artificial airway: A device used to assure free passage of air through the nose, mouth, and pharynx into the trachea.

**lower airway:** The air passage from the larynx to the pulmonary alveoli.

**upper airway:** The air passage from the nose and mouth to the larynx.

**albumin:** A protein substance found in human tissues as well as in other animals and in plants.

**alcohol:** A transparent, colorless, volatile fluid produced by fermentation of carbohydrates with yeast.

**alcoholic:** Pertaining to or containing alcohol; also a person who becomes habituated, dependent, or addicted to alcohol consumption.

**alimentary tract:** The digestive tube from the mouth to the anus.

alkali: Any compound of electropositive element (usually a metal such as sodium) in combination with an electronegative hydroxyl ion or similar ion.

alkaline: Having a pH greater than 7.0; in human physiology, having a pH greater than 7.35.

**alkalinizing agent:** A substance used to increase pH or alkalinity; usually used to offset acidosis.

alkalosis: An abnormal state of the body in which the pH rises above 7.45; loss of too much carbon dioxide by hyperventilation (respiratory alkalosis) or too much acid by vomiting or by overdose of alkalizing agents (metabolic alkalosis).

**allergen:** A substance capable of inducing an allergy or specific hypersensitivity.

allergic reaction: A local or general reaction to an allergen, usually characterized by hives or tissue swelling or dyspnea.

allergy: Hypersensitivity to a substance, causing an abnormal reaction.

alveolar ridge: The bony remains of the jaws from which teeth have been removed.

**alveolus:** A cavity; specifically, the socket holding a tooth; or a terminal air sac of the lung.

**amaurosis:** Loss of sight without apparent lesion of the eye, or from disease.

**amaurosis fugax:** Sudden transitory partial blindness.

**amenorrhea:** Absence of the menstrual flow.

**AMI:** Abbreviation for acute myocardial infarction.

amino acid: An organic acid in which one of the hydrogen atoms has been replaced by a molecular amine group the chief component of protein.

aminophylline: A drug of the theophylline family, helpful in the treatment of asthma, chronic obstructive pulmonary disease, and pulmonary edema.

amniotic fluid: The fluid surrounding the fetus in the uterus, contained in the amniotic sac.

**amniotic sac:** A thick, transparent sac that holds the fetus suspended in the amniotic fluid.

**amobarbital:** A drug of the barbiturate class, with hypnotic/sedative action; a controlled substance drug.

amphetamine: A class of drugs that produces potent central nervous system stimulation; an "upper".

**ampule:** A sealed glass container for medication.

amputation: Complete removal of an appendage.

anaerobic: Life without oxygen.

anaerobic metabolism: Metabolism without air, caused by a lack of gas exchange at the cellular level; product of cardiac arrest mechanism, where no oxygen reaches the cells.

**anal canal:** The terminal portion of the alimentary canal extending from the rectum to the anus.

**analgesic:** A pain-relieving drug; a class of drugs used to reduce pain.

analog signal: A continuous signal in varying amplitude and direction in proportion to the signal source, EKG for example.

**anaphylaxis:** An exaggerated allergic reaction, usually caused by foreign proteins.

anasarca: A severe, generalized edema.

anastomosis: A joining together of blood or lymph vessels by an anatomical, natural arrangement or by accessory channels around a joint, whereby if a chief arterial supply is interrupted, a constant blood flow will be achieved; also a surgical joining of two hollow organs, or of part of the same organ, or between blood vessels.

anatomic position: The presumed body position when referring to anatomical landmarks; upright, facing the observer, with hands and arms at sides, thumbs pointing away from the body, legs and feet pointing straight ahead.

anatomical: Pertaining to anatomy.

**anatomy:** The structure of the body, or the study of body structure.

anemia: The condition in which the blood is deficient in hemoglobin, red blood cells, or in total volume.

anesthesia: A partial or complete loss of sensation with or without loss of consciousness; can result from drug administration or from injury or disease.

aneurysm: A permanent blood-filled dilation of a blood vessel resulting from disease or injury of the blood vessel wall.

angina pectoris: A spasmodic pain in the chest, characterized by a sensation of severe constriction or pressure on the anterior chest; associated with insufficient blood supply to the heart; aggravated by exercise or tension and relieved by rest or medication.

Angiocath: The trade name for an intravenous cannula with a Teflon catheter over the metallic needle; has become a generic name for such a device.

angiogram: A radiographic depiction of blood vessels through the use of an injected contrast medium.

angioneurotic edema: A condition characterized by a sudden appearance of temporary edematous areas of the skin and mucous membranes, often associated with hives, and may be an allergic reaction involving the larynx, face, and other areas of the body; may be a manifestation of anaphylaxis.

**angulation:** The formation of an angle; an abnormal angle in an extremity or organ.

anisocoria: A condition in which two ocular pupils are not equal in size.

**anomaly:** Any marked deviation from the norm.

anorexia: A lack of appetite for food.

anorexia nervosa: A serious nervous condition in which the patient loses his appetite and systematically refuses to take adequate nutrition.

**anoxia:** Without oxygen; a reduction of oxygen in body tissues below required physiology levels.

**antagonism:** An opposite or contrary action, such as that between muscles or medications.

antagonist: Opponent; commonly used as description of a drug that directly counteracts another drug; naloxone is an opiate antagonist.

**ante-:** A prefix meaning before in time or place.

anterior: Situated in front of, or in the forward part of; in anatomy, used in reference to the ventral or belly surface of the body.

**anti-:** A prefix that shows a negative or reversal of the word root placed after it.

antibiotic: A chemical compound produced by and obtained from certain living cells, especially lower plant cells, which is antagonistic to some other form of life, especially pathogenic or noxious organisms.

**antibody:** A substance produced in the body in response to an antigen that destroys or inactivates the antigen.

anticoagulant: A class of drugs that prevent clotting of blood.

**anticonvulsant:** A class of drugs that prevents or terminates convulsions.

**antidote:** A substance to counteract or combat the effect of poison.

antiemetic: A remedy used to control nausea and vomiting.

antigen: A substance that causes the formation of antibodies.

antihistamine: A substance capable of counteracting the pharmacologic effects of histamine by a mechanism other than the production of exactly opposite effects.

**antihypertensive:** A class of drugs that is used to lower blood pressure.

**antipyretic:** A class of drugs that reduces fever.

antiseptic: Any preparation that prevents the growth of bacteria.

antiserum: A serum that contains antibodies against a specific disease-producing organism, such as rabies antiserum.

antivenin: An antiserum containing antibodies against reptile or insect venom.

anus: The outlet of the rectum lying in the fold between the buttocks.

**anxiety:** A feeling of apprehension, uncertainty, and fear.

**aorta:** The largest artery in the body, originates at the left ventricle and terminates at the bifurcation of the iliac arteries.

**apathy:** Lack of emotion or feeling; indifference.

**APCO:** Associated Public-Safety Communications Officers, Inc.

**aphasia:** Loss of power of expression or comprehension of speech, writing, or signs, due to injury or disease.

aphonia: Loss of voice.

apnea: Absence of respiration.

**aponeurosis:** A flat, fibrous sheet of connective tissue that serves to connect a muscle with the part that it moves.

**apoplexy:** Stroke; cerebrovascular accident, caused by blockage or rupture of an artery.

**appendicitis:** Inflammation of the vermiform appendix.

**appendix:** Vermiform appendix, a wormlike diverticulum, or pouch from the cecum.

**aqueous humor:** Fluid circulating in the anterior and posterior chambers of the eye.

**am:** The upper extremity, specifically that segment between the shoulder and elbow.

arrest: Sudden cessation or stoppage.

**arrhythmia:** Any disturbance in the rhythm of the heart.

arterial blood: Oxygenated blood.

**arteriole:** A small artery, that at its distal end leads into a capillary.

arteriosclerosis: A generic name for several conditions that cause the walls of the arteries to become thickened, hard, and inelastic.

**artery:** A blood vessel, consisting of three layers of tissue and smooth muscle, that carries blood away from the heart.

**arthritis:** Inflammatory disease of the joints.

**articulation:** Joining of bones, a joint; touching of one part with another.

**artifact:** That which is artificial, out of place, introduced by human interference.

artificial ventilation: Movement of air into and out of the lungs by artificial means.

**asepsis:** Freedom from infectious agents.

asphyxia: Suffocation.

aspirate: To inhale foreign material into the lungs; to remove fluid or foreign material from the lungs or elsewhere by mechanical suction.

**aspirin:** Salicylic acid acetate; a drug known for its analgesic, fever reducing, and antirheumatic properties.

asthma: A condition marked by recurrent attacks of dyspnea with wheezing due to spasmodic constriction of the bronchi, often as a response to allergens, or by mucous plugs in the bronchioles.

**ASTM:** American Society for Testing and Materials

asymptomatic: Without symptoms.

ataxia: Failure of muscular coordination; often used to describe a staggering gait.

**atherosclerosis:** A common form of arteriosclerosis caused by fat deposits in arterial walls.

atlas: The first cervical opening.

atrium: A thin-walled chamber of the heart; the right atrium receives venous blood from the venae cavae; the left atrium receives oxygenated blood from the pulmonary veins.

**atrophy:** A wasting away of specific tissue.

audio: Relating to sound waves in the range that the human ear can hear; the sound component of a transmitted telemetry signal.

**auditory nerve:** The eighth cranial nerve, mediates hearing and balance.

**aura:** A premonitory sensation of impending illness, usually used in connection with an epileptic attack.

auricle: The external ear; ear flap; also atrium.

**auscultation:** The technique of listening for and interpreting sounds that occur within the body, usually done with a stethoscope.

**automatic reaction:** An action performed without conscious thought.

automatic nervous system: Part of the nervous system concerned with the regulation of bodily functions not controlled by conscious thought; composed of the sympathetic and parasympathetic systems.

**autotransfusion:** A transfusion effected by redirecting the patient's own blood from one part of the body to another.

**avulsion:** An injury that leaves a piece of skin or other tissue either partially or completely torn away from the body.

В

Babinski reflex: A reflex response of movement of the big toe; positive reflex is determined when, on stroking the sole, the toe turns upward; negative is determined by a downward or no movement of the toe.

#### backbone system: A

communications system used to integrate a number of strategically located base stations into a regional communications system; thus, a mobile unit anywhere within the service or of the system can communicate with its control center.

bag of waters: The amniotic sac and its contained amniotic fluid.

bag-valve-mask: A portable artificial ventilation unit consisting of a face mask, one-way valve, and an inflatable bag; producing positive pressure ventilation.

balanced salt solution: A solution of water and salts formulated to match the composition of normal blood; sodium, potassium, and calcium should be in correct proportion as that of blood.

ball-and-socket joint: A joint wherein the distal bone has a rounded head (ball) that fits into the proximal bone's cup-like socket; the hip and shoulder joints, for example.

**band:** A term applied to a group of radio wave frequencies.

**bandage:** A material used to hold a dressing in place.

**barbiturates:** A class of drugs that produce a calming, sedative effect.

**basal cell:** The early keratocyte; a cell present in the basal layer of the epidermis.

basal skull fracture: A fracture involving the base of the cranium.

**base:** Alkaline; a compound that dissociates with formation of a hydroxyl ion (OH<sup>-</sup>); a solution having a pH greater than 7.0.

base station: A station (transmitter, receiver, and station control) installed

at a fixed location and used to communicate with mobile stations.

#### **Basic Life Support (BLS):**

Maintenance of the ABC's (airway, breathing, and circulation) without adjunctive equipment.

**bladder:** A membranous sac; commonly referring to the muscular membranous sac that stores urine.

blanch: To become white or pale.

**blind panic:** A type of panic in which an individual's judgment seems to disappear; seen in situations where there are mass casualties.

**blister:** A collection of fluid under or within the epidermis.

blood: The fluid that circulates through the heart, arteries, capillaries and veins, carrying nutriment and oxygen to the body cells, removing waste products such as carbon dioxide and various metabolic products for excretion.

blood clot: A soft, coherent, jellylike mass resulting from the conversion of fibrinogen to fibrin, thereby entrapping the red blood cells and other formed elements within the fibrinic web.

**Battle's sign:** A contusion on the mastoid process of either ear; sign of a basilar skull fracture.

**beeper:** A term applied to a selectively activated paging receiver usually carried in the pocket or on the belt; upon receiving a page specifically directed to it, the receiver emits a beeping sound.

**Benadryl:** Trade name for diphenhydramine hydrochloride, an antihistamine.

bends: Pain in the limbs and abdomen occurring as a result of bubbles of nitrogen in the blood; caused by too rapid decompression; caisson disease, decompression sickness.

benign: Not dangerous; noncancerous; nonmalignant.

**bevel:** The slanting edges of the point of a needle.

**Benzadrine:** Brand name for amphetamine sulfate, a central nervous system stimulant.

bicarbonate: Any salt having two parts carbonic acid to one of any basic substance; often used as an abbreviated form of sodium bicarbonate; also bicarb.

biceps: The large muscle of the front part of the arm that bends the forearm at the elbow; also, one of the hamstring muscles located on the back of the thigh that flexes and rotates the knee.

bile: A fluid secreted by the liver that is concentrated and stored in the gallbladder and then discharged into the intestine where it aids in digestion of fats.

blood pressure (BP): The pressure exerted by the pulsatile flow of blood against the arterial walls.

blood type: One of the several groups into which human blood is divided according to its antigens.

blood volume: The total amount of blood in the heart and blood vessels; represents 8 to 9 percent of body weight in kilograms.

blood volume expander: The synthetic solution administered intravenously to expand blood volume in the treatment of shock.

**bloody show:** The mucous and bloody discharge signaling beginning of labor.

**boltcutter:** A tool used to cut heavy metal.

**bone:** The hard form of connective tissue that constitutes most of the skeleton in a majority of vertebrates.

bourdon gauge: A calibrated pressure gauge used to record the flow rate of a medical gas from a compressed cylinder.

bowel: See intestine.

brachial artery: The artery of the arm that is the continuation of the axillary artery, that in turn branches at the elbow into the radical and ulnar arteries.

bradycardia: An abnormally slow heart rate, usually any rate less than 60 beats per minute.

**brain:** A soft, large mass of nerve tissue that is contained within the cranium.

**brain contusion:** See cerebral contusion.

brain stem: The stemlike portion of the brain that connects the brain with the spinal cord; includes the pons, medulla, and mesencephalon.

breech birth (breech delivery): The delivery during which the presenting part of the fetus is the buttocks or foot instead of the head.

**bronchial asthma:** The common form of asthma.

**bronchiole:** Any of the smaller bronchi leading into the alveoli of the lung.

bronchiolitis: A condition seen in children under 2 years of age characterized by dyspnea and wheezing, a viral infection often confused with asthma.

**bronchitis:** Inflammation of the bronchi.

**bronchoconstriction:** A narrowing of the bronchial tubes.

**bronchodilator:** A widening of the bronchial tubes.

**bronchospasm:** A severe constriction of the bronchial tree.

bronchus: One of the two main branches of the trachea that lead to the right and left lungs; any of the larger air passages of the lungs.

**bruise:** An injury that does not break the skin but causes rupture of small underlying blood vessels with resulting tissue discoloration; a contusion.

**buccal:** Pertaining to the cheek or mouth.

**burn:** An injury caused by heat, electrical current, and chemicals or extreme acidity or alkalinity.

first degree burn: A burn causing only reddening of the outer layer of skin; sunburn usually is a first degree burn.

second degree burn: A burn extending through the outer layer of skin, causing blisters and edema; A scald is usually a second degree burn.

third degree burn: A burn extending through all layers of skin, at times through muscle or connective tissue, having a white leathery look and is insensitive; grafting is more often necessary with a third degree burn; a flame burn is usually third degree.

burn center: A medical facility especially designed, equipped, and staffed to treat severely burned patients.

**buttock:** The prominence formed by the gluteal muscles on the posterior of both side of the body.

C

cachexia: A state of severe malnutrition and poor health as a result of disease or lack of nourishment.

caisson disease: See bends.

calcium: A mineral substance necessary for life functioning; plays a vital role in heart contraction, nerve conduction, and muscle contractions; cation with double valence.

calcium chloride: CaC1<sub>2</sub>; used to restore electrolyte balance; used in severe cardiac dysfunction as a positive inotropic agent.

cancer: A malignant tumor; commonly any form of malignancy, including leukemia.

cannula: A tube, often fitted with a trocar, used to enter a duct or cavity.

capillary: Any one of the small blood vessels that connect arteriole and venule, and through whose walls various substances pass into and out of the interstitial tissues, and thence on to the cells.

capsule: A cylindrical gelatin container enclosing a does of medication, usually in powdered form.

carbohydrate: A compound represented by the sugars, starches, and cellulose; contains carbon, hydrogen, and oxygen.

carbon dioxide:  $CO_2$ ; a colorless and odorless gas that neither supports combustion nor burns; a waste product of aerobic metabolism; in combination with water ( $H_2O$ ), forms carbonic acid ( $H_2CO_3$ ).

carbon monoxide: CO; a colorless, odorless, and dangerous gas formed by the incomplete combustion of carbon; it combines four times as quickly with hemoglobin than oxygen; when in the presence of heme, replaces oxygen and reduces oxygen uptake in the lungs.

cardiac: Pertaining to the heart.

cardiac arrest: The sudden cessation of cardiac function with no pulse, no blood pressure, unresponsiveness.

cardiac compression: A technique of external heart massage to restore the pumping action of the heart.

cardiac standstill: The absence of cardiac contraction or electrical activity.

cardiogenic: Of cardiac origin.

cardiogenic shock: The inability of the heart to pump adequate amounts of blood to perfuse the vital organs.

cardiopulmonary resuscitation (CPR): The application of artificial ventilation and external cardiac compression in patients with cardiac arrest to provide an adequate circulation to support life.

cardiotonic drugs: A class of drugs that improves and strengthens myocardial contraction.

cardiovascular collapse: Failure of the heart and blood vessels; shock.

**carpals:** The eight small bones of the wrist.

carpopedal spasm: A muscular spasm of the hands and feet.

cartilage: A tough, elastic, connective tissue that covers opposite surfaces of movable joints and also forms parts of the skeleton, such as ear and nose.

cartilaginous: Relating to or consisting of cartilage.

cataract: The partial or complete opacity of the crystalline lens of the eye or its capsule.

catecholamine: A biologically active amine, such as epinephrine, norepinephrine and dopamine, which exerts a strong sympathetic action on the heart and peripheral blood vessels, thereby increasing cardiac output and blood pressure.

**catheter:** A tube used for withdrawing or infusing fluids into various structures of the body.

catheter embolism: The loss of a catheter fragment in a vein from shearing of an indwelling IV catheter.

caustic: Corrosive, destructive to living tissue.

cavity: A hollow or space, especially a space within the body or one of its organ.

abdominal cavity: The space bounded by the abdominal walls, the diaphragm, and the pelvis; contains most of the organs or digestion.

cerum: The pouchlike portion of the large intestine just inferior to the junction of the ileum and ascending colon; the vermiform appendix is attached on the inferior surface.

cell: A small cavity or compartment.

Celsius scale: See centigrade scale.

centigrade scale: The temperature scale in which the freezing point of water is zero degrees and boiling point at sea level is 100 degrees; Celsius scale.

**centimeter:** A unit of measurement of the metric system, one one-hundredth of a meter; approximately two-fifths of an inch.

central nervous system: The portion of the nervous system consisting of the brain and spinal cord.

**cephalic:** Pertaining to the head.

cephalic delivery: A delivery in which the head is the presenting part of the fetus; generally considered to be the normal mode of birth.

**cerebellum:** That portion of the brain behind and below the cerebrum; coordination is the general function.

cerebral: Pertaining to the brain.

**cerebral contusion:** A bruise of the brain, causing a characteristic symptomatic response.

cerebral hemorrhage: Bleeding into the cerebrum; one form of stroke or cerebrovascular accident.

cerebrospinal fluid: The fluid contained in the four ventricles of the brain and the subarachnoid space around the brain and spinal cord.

cerbrovascular accident (CVA): The sudden cessation of circulation to a region of the brain, due to thrombus, embolism, or hemorrhage; also, a stroke or apoplexy.

**cerebrum:** The portion of the brain controlling major functions of the body, including movement, sensation, thinking, and emotions.

cervical: Pertaining to the neck.

**cervical collar:** A device used to immobilize and support the neck.

cervical spine: The superior seven bones of the vertebral column, located in the neck.

**cervix:** The lower portion, or neck, of the uterus.

Cesarean section: The delivery of a fetus by means of an incision into the uterus, usually through the abdominal wall.

**cheek:** The side of the face forming the lateral wall of the mouth.

**cheekbone:** The quadrilateral bone that forms the prominence of the cheek; the zygomatic or malar bone.

chemotherapy: The treatment of disease by drugs; particularly the treatment of malignancy by drugs.

Cheyne-Stokes respiration: An abnormal breathing pattern characterized by rhythmic increase and decrease in depth of ventilation, with regularly recurring periods of apnea; seen in association with central nervous system dysfunction.

**CHF:** Abbreviation for congestive heart failure.

chief complaint: The problem for which a patient seeks help, stated in a word or short phase.

**chills:** A sensation of cold, with convulsive shaking of the body.

cholesterol: A fatty substance found in animal tissue, egg yolks, and in various oils and fats; thought to contribute to arteriosclerosis.

**cholinergic:** Pertaining to the type of chemical activity that is characteristic of acetylcholine.

chordae tendineae: Tendons that attach to the free edges of the leaflets of the mitral and tricuspid valves and to the papillary muscles.

**chronic:** Of long duration, or recurring over a period of time.

chronic obstructive pulmonary disease (COPD): A term comprising chronic bronchitis, emphysema, and asthma; an illness that causes obstructive problems in the airways.

**chronotropic:** Affecting the time or rate; applied especially to drugs whose administration affect the contraction rate of the heart.

circulatory: Pertaining to the heart and blood vessels.

circulatory collapse: The failure of the cardiac and peripheral circulation.

circulatory system: The body system consisting of the heart and blood vessels.

circumduction: Circular movement of a limb or eye.

circus movement: As it pertains to heart stimulation, the circus movement of a stimulus causes reentry of formerly depolarized cells that are repolarized enough to accept the stimulus and depolarize again, passing along the stimulus to cells that are, in turn, repolarized and accept the stimulus, and around it goes again, causing rapid stimulation of the heart.

**cirrhosis:** Chronic progressive fibrosis of the liver, often associated with heavy alcohol ingestion.

clammy: Damp and usually cool.

clavicle: The collarbone; attached to the uppermost part of the sternum at a right angle, and joins the scapular spine to form the point of the shoulder.

clinical: Pertaining to the patient.

clinical death: A term that refers to the lack of signs of life, when there is no pulse and no blood pressure; occurs immediately after the onset of cardiac arrest.

closed fracture: A fracture in which there is no laceration in the overlying skin.

**clot:** A semisolid mass of fibrin and cells.

clubbing: Proliferation of soft tissue about the terminal phalanges of fingers and toes, without osseous change.

**CNS:** Abbreviation for central nervous system.

CO<sub>2</sub>: Chemical formula for carbon dioxide.

**coagulation:** The process of changing a liquid into a thickened or solid state; the formation of a clot.

coalesce: To unite, to mix, to fuse.

cocaine: A crystalline alkaloid obtained from *Erythoxylon coca* (coca leaves) used as a topical anesthetic, but now used more often as a central nervous system stimulant; often abused.

coccyx: The lowest part of the backbone; composed of three to five small, fused vertebrae; also called the tailbone.

coffee grounds vomitus: A vomitus having the appearance and consistency of coffee grounds; indicates slow bleeding in the stomach and represents the vomiting of partially digested blood.

**coke:** Street name for cocaine; also colloquial for Coca-Cola, a popular soda drink, nonalcoholic and nonaddictive.

colic: Acute abdominal pain characterized by intermittent cramps; common in infants and young children; also, pertaining to the colon.

**colostomy:** The creation of an opening between the colon and the surface of the body to provide bowel drainage.

**coma:** A state of unconsciousness from which the patient cannot be aroused even by powerful stimulation.

comatose: In a state of coma.

**comminuted fracture:** A fracture in which the bone ends are broken into many fragments.

common bile duct: The duct formed by the union of the common hepatic ducts and the cystic duct; empties into the duodenum.

**communicable disease:** A disease that is transmissible from one person to another.

complete heart block: The longer than normal R-R interval occurring after a premature ventricular contraction; caused by the failure of the ventricle to contract after the atrial contraction which occurred during the PVC.

compliance: The quality of yielding to pressure or force without disruption, or an expression of the measure of ability to do so; the ability of the lung to distend with air as it is forced into the airways.

compound fracture: An open fracture; a fracture in which there is an open wound of the skin and soft tissues leading down to the location of the fracture.

**compress:** A folded cloth or pad used for applying pressure to stop hemorrhage or as a wet dressing.

concave: Rounded and somewhat depressed or hollowed out.

**concussion:** A violent jar or shock; the central nervous system injury results from the impact.

**condyle:** Rounded projection on a bone, may be covered by cartilage at the joining with another bone.

congenital: Referring to any condition that is present at birth.

congestive heart failure: Excessive fluid in the lungs or tissues caused by the failure of the ventricles to effectively pump blood.

**conjunctiva:** The delicate membrane that lines the eyelids and covers the exposed surface of the eyeball.

connective tissue: The tissue that binds together and supports the various structures of the body.

conscious: Capable of responding to sensory stimuli and having subjective experiences.

**consent:** An agreement by patients to accept treatment offered as explained by medical personnel.

**implied consent:** An assumed consent given by an unconscious adult when emergency lifesaving treatment is required.

informed consent: A consent given for treatment by a mentally competent adult who understands what the treatment will involve; can also be given by parent or guardian of a child, as defined by the State, or for a mentally incompetent adult.

**constrict:** To be made smaller by drawing together or squeezing.

**constricting band:** A band used to restrict the lymphatic flow of blood back to the heart.

**contagious:** A term that refers to a disease that is readily transmitted from one person to another.

**contagious disease:** An infectious disease transmittible by direct or indirect contact; now synonymous with communicable disease.

contaminated: A term used in reference to a wound or other surface

that has been infected with bacteria; may also refer to polluted water, food or drugs.

**contraction:** A shortening of muscle fiber.

**contractility:** The ability of any muscle fiber to contract when it is depolarized by a stimulus.

**contraindication:** Not indicated; a situation that prohibits the use of a drug or technique.

contralateral: On the opposite side.

contusion: A bruise; an injury that causes a hemorrhage in or beneath the skin but does not break the skin.

convection: The conveyance of heat in liquid or gaseous form by movement of heated particles (as when the warm air of a room ascends to the ceiling); the loss of body heat to the atmosphere when air passes over the body.

**convex:** Rounded and somewhat elevated.

**convulsion:** A violent involuntary contraction or series of contractions of the voluntary muscles; a fit or seizure.

**COPD:** Abbreviation for chronic obstructive pulmonary disease.

core temperature: A body temperature measured centrally, from within the esophagus or rectum.

**corium:** The fibrous, inner layer of the skin, the true skin.

**cornified:** Converted into tough tissue; keratinized; used to describe the outermost layer of skin.

**coronary:** A term applied to the cardiac blood vessels that supply blood to the walls of the heart.

coronary artery: One of the two arteries arising from the aortic sinus to supply the heart muscle with blood.

coronary artery disease: A progressive narrowing and eventual obstruction of the coronary arteries by the atherosclerotic process.

coronary bypass: The surgical procedure whereby a graft of part of the external saphenous vein is used to pass by a blocked coronary artery.

coronary occlusion: An obstruction in the coronary artery that hinders the flow of blood to some part of the heart; may be caused by narrowing of the vessel by atheromatous plaque or by a clot or by spasm of the vessel itself.

coronary thrombosis: The blockage of a coronary artery by a clot.

**corticosteroid:** A class of drugs, similar to the naturally occurring steroid hormones, sometimes used to counteract inflammation.

costal: Pertaining to the ribs.

**costochondral:** Pertaining to the rib and its cartilaginous portion attached to the sternum.

costovertebral angle: The angle formed by the spinal column and the 12th ribs; the general anatomic location of the kidneys.

**countershock:** The application of direct current to the patient in order to counteract some dysrhythmia of the heart.

**CPR:** Abbreviation for cardiopulmonary resuscitation.

**cramp:** A painful spasm, usually of a muscle; a gripping pain in the abdominal area; colic.

craniad: Toward the head.

cranial nerves: The 12 pairs of nerves connected directly with the brain.

cranium: Skull.

cravat: A special type of bandage made from a large triangular piece of cloth and folded to form a band; used as a temporary dressing for a fracture or would. **crepitus:** A grating sound heard and the sensation felt when the fractured ends of a bone rub together.

**crib death:** See sudden infant death syndrome.

cricoid cartilage: The thick ringshaped cartilage inferior to the thyroid cartilage of the larynx.

cricothyroid membrane: The fibrous tissue between the superior thyroid cartilage and the inferior cricoid cartilage.

**crisis:** A critical turning point or juncture; applied to both medical and psychiatric problems.

croup: A common viral disease of children; characterized by spasm of the larynx and resulting upper airway obstruction.

crowbar: A long metal bar with a chiselike point at one end; used as a lever for prying.

**crowning:** The stage of birth when the presenting part of the baby is visible at the vaginal orifice.

crystalloid: A substance capable of crystallization that, in solution, may be diffused through animal membranes; does not contain protein molecules.

**CSF:** Abbreviation for cerebrospinal fluid.

**cumulative action:** Action of increased intensity evidenced after several portions of the drug are taken.

cutaneous: Pertaining to the skin.

**cutdown:** Surgical exposure of a vessel to insert a cannula for the purpose of administering fluids or other medications.

CVA: Abbreviation for cerebrovascular accident.

**cyanosis:** A blueness of the skin due to insufficient oxygen in the blood.

cyclic: Occurring periodically.

**cystic:** Pertaining to cysts; also to the urinary bladder.

D

**Darvon:** A trade name for propoxyphene, a narcotic.

decerebrate posture: A posture assumed by a patient with severe brain dysfunction; characterized by extension and internal rotation of the arms and extension of the legs.

**decompensation:** Failure of the heart to maintain sufficient circulation of the blood.

**decompression:** Removal of compression or pressure.

decompression chamber: A chamber of compressed air into which a person may be introduced to treat decompression sickness by recompressing the person and gradually lowering the pressure in the chamber to match the local atmosphere; also, hyperbaric chamber.

decompression sickness: Bends; a condition caused by nitrogen bubbles that have returned to a gaseous state becoming lodged in blood or body tissues; characterized by pain in joints and chest, itching of skin, pulmonary edema.

decontaminate: Remove foreign substance that could cause harm; frequently used to describe removal of radioactive material from person, clothing, or area.

decorticate posture: The posture assumed by patients with a lesion at the brainstem level or above; characterized by tightly flexed arms, clenched fists, and slightly extended legs.

decubitus ulcer: A bedsore; ulcer caused by lack of blood supply to an area because of the pressure exerted on it by the part pressing against the bedding.

**defecate:** To discharge feces from the rectum.

**defibrillation:** Removal of fibrillation; applying unsynchronized direct

current electrical shock to terminate fibrillation.

**defibrillator:** Any agent or measure that causes fibrillation to cease.

**definitive care:** Care given that will actually reverse, or act as a medium to reverse, a pathologic condition.

**dehydration:** Loss of water and electrolytes; excessive loss of body water.

delirium: A mental disturbance characterized by illusions, hallucinations, excitement, physical restlessness, having a short duration.

**delirium tremens:** DT's a form of insanity, often temporary, caused by alcohol poisoning; characterized by sweating, tremor, great excitement, precordial pain, anxiety, and mental distress; occurs usually following heavy alcohol intake.

**delusion:** A belief or feeling that has no basis in fact; seen in several types of mental illness.

**Demerol:** A trade name for meperidine hydrochloride, a synthetic narcotic.

**dementia:** Progressive mental deterioration due to organic disease of the brain.

**depressant:** An agent that lowers functional activity, a sedative.

**depressed fracture:** A skull fracture with impaction, depression, or a sinking in of the fragments.

depression: A mental state characterized by feelings of dejection, psychomotor retardation, insomnia, or weight loss, often of delusional proportion.

**dem:** Prefix meaning having to do with skin.

demis: The inner layer of skin; contains the skin appendages, hair follicles, sweat glands, nerves, and blood vessels.

dextran: A water-soluble polysaccharide used as a synthetic plasma volume expander in infusions.

diabetes: A general term referring to disorders characterized by excessive urine excretion, excessive thirst, and excessive hunger.

diabetic coma: Loss of consciousness due to severe diabetes mellitus which has not been treated or to treatment which has not been adequately regulated.

diagnosis: The determination of the nature of a pathological condition.

diagnostic signs: The indications of a patient's physiologic state and the determining factors for treatment.

dialysis: The passage of substances through a membrane; the process of removing undesirable factors from a fluid through a selectively permeable membrane.

diaphoresis: Profuse perspiration.

**diaphragm:** The flat group of muscles and tendons that separate the abdominal and thoracic cavities.

**diaphragm:** The flat group of muscles and tendons that separate the abdominal and thoracic cavities.

**diarrhea:** The passage of frequent watery or loose stools.

diazepam: A tranquilizer and muscle relaxant drug sometimes used for treatment of seizures; trade name Valium.

**digestion:** The process by which food is converted into simple chemical substances that can be absorbed by the intestines.

digestive tract: The passage of tubes leading from the mouth and pharynx to the anus; the alimentary tract; mouth, pharynx, esophagus, stomach, small intestine, large intestine, rectum, and anus.

digitalis: A drug used in the treatment of heart disease, especially heart failure and some atrial arrhythmias; a cardiac glycoside from digitalis purpusa, or purple foxglove, a common herb.

digitalis toxicity: A state caused by an overdose of digitalis marked by anorexia, nausea, vomiting, yellow or green vision, and by increasing AV block, premature contractions, bradycardia.

dilatation: The act of widening an orifice beyond its normal dimensions.

dilated pupil: An ocular pupil enlarged beyond its normal size.

**dilation:** The process of expanding or enlarging.

**Dilaudid:** The trade name for dihydromorphinone, a drug with analgesia of the narcotic variety, and a respiratory depressant.

diplopia: Double vision.

direct current electric shock: Electric shock derived from storage batteries, as opposed to electric shock derived from alternating current; preferred method of defibrillation.

**disc:** The cartilaginous pad between the vertebrae that separates and cushions them.

**discharge:** Setting free or liberation; release the electrical charge in defibrillation.

**disentanglement:** The freeing of an entrapped victim.

**dislocation:** The state of being misaligned; the displacement of the

ends of two bones at their joint so that the joint surfaces are no longer in proper contact.

disorganization: A disturbed mental state characterized by the inability to estimate direction or location or to be aware of time or other people.

dispatcher: One who transmits calls to service units and sends vehicles and personnel on assignments.

**distal:** Farthest from any point on the center or median line; in extremities, farthest from the point of junction of the trunk of the body.

**distention:** The state of being inflated or enlarged, particularly of the abdomen.

**distortion:** The state of being twisted out of normal or natural shape or position.

**diuresis:** Increased secretion of urine.

diuretic: An agent used to increase the secretion of urine by the kidneys.

**diverticulitis:** Inflammation of a diverticulum of the colon.

**DOA:** Abbreviation for dead on arrival.

doll's eye reflex: A test for brain damage wherein the eyes move in the same direction as the head is

turned from side to side, as if the eyes were painted (doll's) eyes.

dominant pacemaker: That part of the cardiac conduction system that has control of the heart stimulus; normally the sinoatrial node.

dorsal: Toward the back.

dorsalis pedis: The artery whose pulse is palpated on the dorsal part of the foot (the instep).

dorsiflexion: The turning of the foot or toes upward.

**DOS:** Abbreviation for dead at the scene.

**DOT:** Department of Transportation.

dressing: A protective covering for a wound; used to stop bleeding and to prevent contamination of the wound.

D.T.'s: See delirium tremens.

dumbcane: A tropical American herb (Dieffenbachia sequine) that when chewed causes the tongue to swell, may be severe enough to threaten the airway.

**duodenum:** The segment of the small intestines that lies just distal to the stomach, said to be about twelve finger breadths in length.

dying heart: A heart with feeble, ineffectual ventricular contractions; evidenced on EKG by greatly widened QRS complexes with electromechanical dissociation; asystole.

**dys-:** Prefix meaning bad, or difficult.

dysconjugate vision: A condition in which the two eyes are not aligned, but stare in different directions.

**dysfunction:** Abnormal function of an organ or body part.

**dysmenorrhea:** Painful or difficult menstruation; menstrual cramps.

**dysphagia:** An inability to swallow or difficulty in swallowing.

**dyspnea:** Painful or difficult breathing; usually used to mean rapid, shallow respirations.

**dysrhythmia:** A disturbance in the cardiac rhythm.

E

eardrum: A flexible membrane that forms most of the outer wall of the tympanic cavity and separates it from the external auditory canal; the tympanum.

ecchymosis: Blood under the skin causing a black and blue mark; bruise.

**ECF:** Abbreviation for extracellular fluid.

**ECG:** Abbreviation for electrocardiogram; also EKG.

eclampsia: A toxic condition of pregnancy, causing convulsions and coma, associated with hypertension, edema, and proteinuria.

**-ectomy:** Suffix meaning surgical removal, as in appendectomy.

**ectopic:** Out of place; located away from the normal position.

ectopic pregnancy: A pregnancy in which the fetus is implanted elsewhere than in the uterus, e.g., in the fallopian tube or in the abdominal cavity; produces abdominal pain, bleeding.

edema: A condition in which fluid escapes into the body tissues from the vascular or lymphatic spaces and causes local or generalized swelling.

**EEG:** Abbreviation for electroencephalograph.

**EENT:** Abbreviation for eye, ear, nose and throat.

**effusion:** A leakage of fluid from tissues into a cavity, such as into the pleural cavity.

**ejaculation:** A sudden act of expulsion; the expulsion of semen.

**EKG:** Abbreviation for electrocardiogram.

electrocardiogram: A graphic tracing of the electrical currents generated by the process of depolarization and repolarization of the myocardial tissues.

**electrocution:** Death caused by passage of electrical current through the body.

electroencephalogram: A recording of the electrical potentials on the skull generated by currents emanating spontaneously from nerve cells in the brain.

elixir: A liquid oral medication containing flavorings, sweetening, or alcohol.

**emaciation:** A wasted condition of the body; extreme leanness.

emboli: Plural of embolus.

embolism: The sudden blocking of an artery or vein by a clot or foreign material which has been brought to the site of lodgement by the blood current.

embolus: A clot or another plug brought by the blood from another vessel and forced into a smaller one, thus obstructing the circulation.

embryo: In animals, the derivatives of the fertilized egg, that eventually becomes offspring, during their period of most rapid development, in man, from about 2 weeks after fertilization to the end of the seventh or eighth week.

emesis: Vomiting.

**emetic:** An agent that causes vomiting.

emphysema: A chronic lung disease caused by distention of the alveoli and/or destruction of their walls; a pathological accumulation of air in tissues, or organs, as in subcutaneous emphysema.

**EMD:** Emergency Medical Dispatch; also, Emergency Medical Dispatcher.

EMDPRS: Emergency Medical Dispatch Protocol Reference System; a tool used by Emergency Medical Dispatchers for questioning callers about the nature of a medical emergency, response modes and configurations and provision of medically approved instructions as appropriate.

EMS: Emergency Medical Services.

**EMT:** Emergency Medical Technician.

**EMT-A:** Emergency Medical Technician - Ambulance.

**EMT-I:** Emergency Medical Technician - Intermediate.

**EMT-P:** Emergency Medical Technician - Paramedic.

emulsion: A preparation of one liquid distributed in small globules throughout the body of a second liquid; used as a lubricant.

**encephalitis:** Inflammation of the brain.

endocardium: The membrane lining the inside of the heart.

endocrine: Secreting internally.

endoscope: An instrument for the examination of the interior of a hollow organ, such as the stomach or bladder.

**endotracheal:** Within or through the trachea, an endotracheal tube.

endotracheal intubation: The insertion of a tube through the mouth or nose and into the trachea.

endotracheal tube: One of a series of graduated tubes, with or without inflatable cuffs, to be inserted in the trachea for the purpose of maintaining an airway and/or delivery of oxygen.

enteritis: An inflammation of the small intestine, usually accompanied by diarrhea.

**enterocolitis:** Inflammation of the small intestine and colon.

envenomation: The poisonous effects caused by the bites, stings, or deposits of insects, spiders, snakes, or other poison-carrying animals.

**epi-:** Prefix meaning on top of or above.

epicardium: The serous layer of pericardium covering the outside of the heart.

epidemic: An occurrence of a disease among many people over a given area.

epidermis: The outermost and nonvascular layer of the skin.

**epidural:** Located outside or above the dura, the outermost membrane that covers the brain.

**epigastrium:** The upper and middle regions of the abdomen within the costal angle.

epiglottis: The lid-like cartilaginous structure overhanging the superior entrance to the larynx and serving to prevent food from entering the larynx and trachea while swallowing.

epiglottitis: A bacterial infection occurring in children, marked by swelling of he epiglottis, high fever, pain on swallowing, and drooling; airway obstruction can result with great rapidity.

epilepsy: A chronic brain disorder marked by paroxysmal attacks of brain dysfunction, usually associated with some alteration of consciousness, abnormal motor behavior, psychic or sensory disturbances; may be preceded by aura.

epinephrine: A hormone released by the adrenal medulla which stimulates the sympathetic nervous system, producing vasoconstriction, increased heart rate and bronchodilation.

erectile tissue: The tissue containing large vascular spaces that fill with blood on stimulation, such as the penis, clitoris, and nipple.

**erythema:** A redness of the skin produced by congestion of the capillaries.

erythrocyte: A red blood cell.

eschar: A thick, coagulated crust or slough that develops after a thermal burn, cauterization, or laceration of the skin; a scab.

esophageal obturator airway (EOA):

A device used to provide an adequate airway by blocking off the esophageal opening with a cuffed obturator and providing ventilation through a series of side holes located at the level of the epiglottis.

esophagus: The portion of the digestive tract that lies between the pharynx and the stomach.

**estrogen:** One of the classes of female sex hormones.

ethmoid: Bone found at the roof of the nose, the base of the cranium, and between the eyes; through it pass the olfactory nerves.

**etiology:** The study of the factors that cause disease.

**euphoria:** A feeling of well-being and happiness.

eustachian tube: The tube leading from the back of the throat to the middle ear; serves to equalize pressure in the middle ear.

evaporation: Conversion of a liquid or solid to a gas.

**evert:** To turn inside out; to turn outward.

eviscerate: To remove or expose the intestines.

exacerbation: A relapse or worsening of a disease condition.

**excoriation:** Any superficial loss of substance, such as that produced on the skin by scratching.

**excretion:** The process whereby the residue of food and waste products of metabolism are eliminated.

**exhalation:** The act of breathing out; expiration.

**exophthalmus:** Abnormal protrusion of the eye.

**expectorant:** A drug that loosens and facilitates the removal of secretions in the bronchial tubes.

exsanguinate: To bleed to death.

extension: The process of straightening; the movement by which the two ends of any joined part are drawn away from each other. external cardiac compression: The method by which mechanical depression of the lower half of the sternum compresses the ventricles and forces blood into the systemic and pulmonary circulation.

extracellular fluid: The portion of the total body water outside the cells, composed of the interstitial and intravascular fluid.

extract: A concentrated preparation of a drug prepared by dissolving the drug in alcohol or water and evaporating off the excess solvent to a prescribed standard.

**extraocular motions:** The movement of the eyes.

**extrasystole:** An extra heartbeat, often a premature contraction.

extremity: A limb, an arm, or a leg.

**extrication:** Disentanglement; freeing from entrapment.

**extruded:** Pushed out of normal position.

eyelid: Either of the two movable conjunctival-cutaneous folds that protect the anterior surface of the eyeball.

facemask: A devise used for the administration of gases, particularly oxygen, or for the redirection of room air, as in the esophageal obturator airway.

facilitation: The technique of encouraging patients to communicate by small positive responses, such as nodding the head or saying "I see."

fainting: A momentary loss of consciousness caused by insufficient blood supply to the brain; syncope.

**fallopian tube:** The bilateral tubes extending from the ovaries to the uterus.

false motion: A motion of an extremity or a part of the body where ordinarily there should be none, indicative of a fracture or dislocation.

fascia: A sheet or band of fibrous tissue; lies deep under the skin and acts as an anchor for muscle attachment.

fatigue fracture: A fracture in which the bone breaks as a result of repeated stress that cannot be tolerated by that particular bone; most likely involving bones of feet or legs.

fatty acid: Any acid derived from fats by hydrolysis.

FCC: Abbreviation for Federal Communication Commission.

**febrile:** Pertaining to fever.

feces: The product expelled by the bowels; semisoft waste products of digestion.

Federal Communications
Commission: The principal
regulatory agency that assists radio
frequencies and licenses individuals
and communications systems.

femoral: Pertaining to the femur or thigh bone.

femoral artery: The principal artery of the thigh, a continuation of the iliac artery; supplies blood to the lower abdominal wall, the external genitalia, and the lower body extremities; pulse may be palpated in the groin area.

femur: The bone that extends from the pelvis to the knee; the longest and largest bone of the body; the thigh bone.

fetal death certificate: The certificate required when a baby is born dead (stillbirth); most states regard stillbirths of less than 20 weeks pregnancy as abortions and may or may not require registration of a birth.

fetus: The unborn offspring in the postembryonic period after major structures have been outlined; in man from 7 or 8 weeks after fertilization until birth.

**fever:** An elevation of body temperature beyond normal.

**fibrillation:** Asynchronous, uncoordinated contraction of individual muscle fibers, producing no effective contraction.

**fibrosis:** The formation of fibrous tissue that causes scarring, usually as part of a reparative or reactive process.

**fibula:** The smaller of the two bones of the lower leg; the most lateral bone of the lower leg.

**first responder:** A person who arrives first at the scene of a medical emergency, usually police or firefighters.

**flaccid:** A term meaning soft, limp, without any muscular tone.

flail chest: A condition in which several ribs are broken, each in at least two places; or a sternal fracture or separation of the ribs from the sternum producing a free-floating segment of the chest wall that moves paradoxically on respiration.

flail segment: That segment of the chest wall, in a flail chest injury, lying between the rib fractures and moving paradoxically with respirations.

**flatulence:** Excessive formation of gases in stomach or intestine.

**follicle:** A deep, narrow pit in the skin containing the root of the hair; the duct of the sebaceous gland opens into the follicle.

**foot-drop:** A paralysis of the dorsiflexor muscles of the foot and ankle; the foot falls and the toes drag on the ground when walking.

**forearm:** The part of the upper extremity between the elbow and the wrist.

**foreskin:** The free fold of skin that covers the glans penis more or less completely.

Fowler's position: The head of the patient is raised 18 to 20 inches above level, with the knees of the patient raised also.

fracture: A break or rupture in a bone.

closed fracture: A simple fracture, one that does not cause a break in the skin.

comminuted fracture: A fracture in which the bone is shattered, broken into small pieces.

compound fracture: An open fracture, one in which the bone ends pierce the skin.

greenstick fracture: An incomplete fracture, the bone is not broken all the way through, seen most often in children.

impacted fracture: A fracture in which the ends of the bones are

jammed together.

**oblique fracture:** A fracture in which the break crosses the bone in an angle.

**open fracture:** A compound fracture, one in which the skin is opened.

simple fracture: A closed fracture, one in which the skin is not broken.

spiral fracture: A fracture in which the break line twists around and through the bone. transverse fracture: A fracture in which the break line extends across the bone at right angle to the long axis.

fracture-dislocation: A fracture of a bone near an articular with a concomitant dislocation at that joint.

fracture of the hip: A fracture that occurs at the upper end of the femur, most often at the neck of the femur.

**frequency:** The number of waves per unit of time; also the number of occurrences of an illness per unit of time.

frequency modulation: A method of converting an analog signal into a tone of varying pitch that can be transmitted over the radio.

frontal: Pertaining to the forehead region, of the frontal bone; the position of facing straight ahead; the plane that divides the body into front and back parts.

frontal lobe: The portion of the brain under the frontal bone.

frost nip: The superficial local tissue destruction caused by freezing; limited in scope and does not destroy the full thickness of skin.

**frostbite:** The damage to tissues as a result of prolonged exposure to extreme cold.

fungus: Any vegetable organism of the class to which mushrooms and molds belong, many classes being pathogenic for man.

fuse: To unite or join together.

**fused joint:** A joining of bones to form a rigid structure, as in the skull or sacrum.

G

gaining access: Establishing a means of reaching the patient who is entangled in some problematic situation.

gait: The manner in which a person walks.

**gallbladder:** The sac located just beneath the liver that concentrates and stores bile.

gamma rays: An electromagnetic radiation emitted from radioactive substances analogous to x-rays.

ganglion: A knot or mass; a group of nerve cell bodies located outside the central nervous system.

gangrene: Local tissue death as the result of an injury or inadequate blood supply.

gas gangrene: A disease originating in a wound infected with *Clostridium* perfringens; results in rapid tissue destruction.

gastric: Pertaining to the stomach.

gastric juice: The digestive fluids secreted by the stomach; a thin colorless liquid that has an acid reaction; contains mainly hydrocholoric acid, pepsin, and mucus.

gastrointestinal: Pertaining to the stomach and intestine.

gastrointestinal tract: The digestive tract, including stomach, small intestine, large intestine, rectum, and anus.

gauge: A term that refers to the diameter of a needle or a needle cannula.

generic name: The name given to a drug by the company that first manufactures it; usually a simplified version of the chemical name.

genitalia: The external sex organs.

Genito-Urinary system: The system including all the organs involved in reproduction and in the formation and voiding of urine.

**geriatric:** A term that refers to the elderly.

**germicidal:** Destructive to germs (microbes).

**gestation:** The period of development of the young; pregnancy.

gland: An organ or any cell group that produces a secretion not related to its ordinary needs.

**glaucoma:** A disease that produces increased pressure within the eyeball; can lead to blindness.

glenohumeral joint: The shoulder joint; the joint between the upper end of the humerus and the scapula.

**glottis:** The vocal apparatus of the larynx, consists of the true vocal cords and the opening between them.

glucose: A simple sugar.

glycogen: The form in which carbohydrates are stored in animal and human tissue.

glycolysis: The breaking down of sugars into simpler compounds.

**goiter:** Enlargement of the thyroid, causing a swelling in the neck, caused by iodine deficiency in the diet.

gonad: An ovary or testis.

gonorrhea: A contagious inflammation of the genital mucous membrane; the most common venereal disease.

grand mal: A type of epileptic attack; characterized by a short-term, generalized, convulsive seizure.

granuloma: Any one of a large group of distinctive focal lesions that are granulelike or nodular; formed as a result of inflammatory reactions and ordinarily persist in the tissue as slowly smoldering inflammations.

gravid: Pregnant.

**groin:** The inguinal region; junction of the abdomen and the thigh.

gullet: Esophagus; the passage from the pharynx to the stomach.

gums: The dense fibrous tissue covered by mucous membrane holding the teeth in place; envelopes the alveolar processes of the upper and lower jaws and surrounds the necks of the teeth.

Н

habituation: A situation in which a patient produces a tolerance to a drug and becomes psychologically dependent on the drug.

half-ring splint: A traction splint with a hinged half-ring at the upper end that allows the splint to be used on either right or left leg.

hallucination: A sensory perception not founded on objective reality; may involve smell, touch, taste, sight, and hearing.

hallucinogen: A drug or agent that has the capacity to induce hallucinations.

**headband:** A band used to secure a patient's head to a spineboard.

head-tilt maneuver: A procedure for opening the airway to relive obstruction caused by the tongue; with one hand beneath the patient's neck and one hand on the patient's forehead the neck if lifted and the head is tilted backward as far as possible; not recommended in patients with possible neck injury.

heart: A hollow muscular organ that receives the blood from the veins, sends it through the lungs to be oxygenated, then pumps it to the arteries.

heart attack: A layman's term for a condition resulting from blockage of a coronary artery and subsequent death of part of the heart muscle; an acute myocardial infarction; a coronary.

heat cramps: A painful muscle cramp resulting from excessive loss of salt and water through sweating.

heat exhaustion: A prostration caused by excessive loss of water and salt through sweating; characterized by clammy skin and a weak, rapid pulse.

**hematemesis:** A condition in which the patient vomits blood.

**hematochezia:** The passage of grossly bloody stools or bright red blood from the rectum.

**hematoma:** A localized collection of blood in an organ, tissue, or space as a result of injury or a broken blood vessel.

hematuria: Blood in the urine.

hemic hypoxia: A condition of insufficient oxygen in the blood that is related to a diminished capacity of the red blood cells to carry oxygen.

**hemiparesis:** A weakness on one side of the body.

**hemiplegia:** Paralysis of one side of the body.

**hemithorax:** Refers to one side of the chest.

**hemodialysis:** The process of removing certain noxious agents from the blood by diffusion through a semi-permeable membrane.

hemoglobin: The oxygen carrying substance of the red blood cells; when it has absorbed oxygen in the lungs, it is bright red and called oxyhemoglobin; after it has given up its oxygen to the tissues, it is purple in color and is called carboxyhemoglobin.

hemolysis: The disintegration of the red blood cells due to an adverse factor, such as transfusion reaction or snakebite.

hemophilia: An inherited blood disease occurring mostly in males, characterized by the inability of the blood to clot.

hemopneumothorax: The accumulation of air and blood in the pleural cavity.

**hemoptysis:** Coughing up blood from the lungs.

**hemorrhage:** Abnormally large amount of bleeding.

hemorrhagic shock: A state of inadequate tissue perfusion due to blood loss.

hemostasis: The stopping or slowing of a hemorrhage; the method of stopping hemorrhage.

**hemothorax:** Bleeding into the thoracic cavity.

**hepatic:** Pertaining to the liver.

hepatitis: Inflammation of the liver.

hepatomegaly: A condition of having an enlarged liver.

hernia: The abnormal protrusion of any organ through an opening into another body cavity; most common is the inguinal hernia where a loop of intestine descends into the inguinal canal in the groin.

heroin: An alkaloid prepared from morphine by acetylization; formerly used for relief of coughs; because of the great danger of addiction following use of the drug, its manufacture and importation into the United States is prohibited.

hiatus (or hiatal) hernia: A protusion of the stomach into the mediastinum through an opening in the diaphragm; can cause chest pain similar to angina pectoris or that of acute myocardial infarction.

**hinge joint:** A specialized joint found in the elbow, knee.

hip: The lateral prominence of the pelvis from the waist to the thigh; more strictly, the hip joint.

hip joint: The ball and socket joint formed by the articulation of the head of the femur and the acetabular fossa.

histamine: A decomposition product of histidine, formed in the intestines and found in most body tissues or produced synthetically; it causes dilation and increased permeability of capillaries and stimulates gastric secretion and visceral muscle contraction.

history: Information about the patient's chief complaint, symptoms, data leading up to the acute episode, previous illnesses, family history, and surgical history.

hives: Red or white raised patches on the skin, often attended by severe itching; a characteristic reaction in allergic responses.

homeostasis: A tendency toward stability in the body's internal environment; a return to normal after any deviation.

**homicide:** The act of deliberately taking another person's life.

**hormone:** A substance secreted by an endocrine gland that has effects upon other glands or systems of the body.

**host:** The organism that a parasite lives in or on.

**hostility:** A strong dislike, anger, or resistance toward an individual, group, or idea.

**hot wire:** A wire through which an electric current is passing; a live wire.

**humerus:** The bone of the upper arm.

humidification: The process of adding water to a gas or to the atmosphere, making the gas or atmosphere moist.

**humidifier:** A device used with an oxygen supply to moisten the oxygen and to prevent its drying effect on the mucous membranes of the patient.

**humor:** The extracellular fluids of the body; also, mirth.

**hydration:** The state of water balance in the body.

**hydrothorax:** Fluid in the chest cavity.

**hygroscopic:** Taking up and retaining water readily.

**hyper-:** Prefix meaning excessive, or increased.

**hyperactive:** A term meaning excessively or pathologically active.

**hypercapnia:** Excess of carbon dioxide in the blood.

**hyperemia:** An increased blood flow to a part of the body.

**hyperextend:** An overextension of a limb, or other part of the body.

hyperflexia: An overactive reflex.

hyperglycemia: An abnormally increased concentration of sugar in the blood.

**hypernatremia:** Excess of sodium (Na) in the blood.

**hyperpnea**: An increased depth of respiration.

**hyperpyrexia:** An abnormally high fever; hyperthermia.

**hyperresonance:** An abnormally increased resonance to percussion.

hypersensitivity: A reaction to contact with certain substances; allergy.

hypertension: High blood pressure.

**hyperthermia:** An abnormally increased body temperature; hyperpyrexia.

hypertonic: A solution having an osmotic pressure greater than a solution to which it is being compared (usually the intracellular fluid, or plasma).

hypertrophy: The morbid enlargement or overgrowth of any organ or part due to an increase in the size of its constituent cells.

hyperventilation: An increased rate and depth of breathing resulting in an abnormal lowering of arterial carbon dioxide, causing alkalosis.

**hypervolemia:** Abnormally increased volume as of the blood.

**hyphema:** Hemorrhage within the anterior chamber of the eye.

**hypnotic:** A medication causing sleep.

**hypo-:** A prefix meaning less than, lack of, a deficiency.

**hypoalimentation:** Insufficient nourishment.

**hypocapnia:** Too little carbon dioxide in the blood.

**hypocarbia:** An abnormally low carbon dioxide tension in the blood.

**hypochondriasis:** Anxiety about one's health, with complaint of minor disorders.

hypoglycemia: an abnormally diminished concentration of sugar in the blood; insulin shock.

**hypopharynx:** The lowest part of the pharynx leading to the larynx and esophagus.

**hypopnea:** Abnormal decrease in depth and rate of breathing.

**hyposensitive:** Less sensitive than normal.

hypotension: Low blood pressure.

hypothalamus: The portion of the brainstem that activates, controls, and integrates peripheral autonomic mechanisms, endocrine activity, water balance, and automatic functions, such as sleep.

**hypothermia:** Decreased body temperature.

hypotonic: A solution having an osmotic pressure less than a solution to which it is being compared (usually the intracellular fluid, or plasma).

hypoventilation: A reduced rate and depth of breathing resulting in a rise in arterial carbon dioxide pressure, acidosis.

**hypovolemia:** A decreased amount of blood in the body.

hypovolemic shock: Shock caused by a reduction in blood volume, such as caused by hemorrhage.

**hypoxemia:** A term that refers to inadequate oxygen in the blood.

hypoxia: A low oxygen content in the blood; lack of oxygen in inspired air.

ı

**ICF:** Abbreviation for intracellular fluid.

icterus: Jaundice; the yellow appearance of the skin and other tissues due to the accumulation of bile pigments; seen in liver disease.

idiopathic: Of unknown cause.

idiosyncrasy: Anything that is peculiar to the individual; an unusual reaction to a drug, food, idea, action, or substance that is peculiar to the individual.

immersion feet: A disorder of the feet following prolonged immersion in water; when first removed from the water, the patient's feet are swollen, cold, waxy white with cyanotic areas, and anesthetic; a short time later the parts become red and hot and the swelling increases.

immobilization: To hold a part firmly in place, as with a splint.

**immobilize:** To make incapable of moving.

**immune:** Resistant to an infectious disease.

**immunization:** The process or procedure by which resistance is produced in a living organism; vaccination.

**impaled object:** An object that has caused a puncture would and remains embedded in the wound.

incision: A would usually made deliberately in connection with surgery; a clean cut as opposed to a laceration.

incompatibility: In blood typing, the situation in which donor and recipient blood cannot be mixed without clumping or other adverse reactions.

**incontinence:** An inability to prevent the release of urine or feces.

**incubation:** The time period between exposure to an infection and the appearance of the first symptoms.

**incubator:** A device that provides protection and temperature control for a newborn infant or a high risk infant of any age.

indication: The circumstances in which a drug or other treatment is of value in the care of a patient.

**indirect contact:** A means of transmitting a communicable disease through the use of a vector, a third item that acts a mediary.

**infarction:** The death (necrosis) of a localized area of tissue by cutting off its blood supply.

**infect:** To contaminate an organism with a disease-inducing substance.

**infection:** An invasion of a body by disease-producing organisms.

**infectious:** Capable of being transmitted by infection.

**inferior:** Anatomically, situated below, or directed downward, or the lower surface or part of a structure.

inferior vena cava: One of the two largest veins in the body that empties venous blood into the right atrium receiving blood from the lower extremities and abdominal organs.

infiltration: Leakage of fluid into the interstitial compartment, usually as a result of improper cannulation of a vein, or by design, to render insensitive the area of surgical procedures, such as suturing.

**inflammation:** A tissue reaction to disease, irritation, or infection, characterized by pain, heat, redness, and swelling.

**infusion:** Induction by gravity of a therapeutic fluid other than blood into a vein.

**ingestant:** That which is taken by mouth, ingested.

ingestion: Intaking of food or other substances through the mouth.

inhalation: The drawing of air or other substances into the lungs.

injection: The forcing of a liquid through a needle or other tube into subcutaneous tissues, the blood vessel, a muscle mass, or an organ.

innervation: Nerve supply to an area; distribution of the nerves.

innocuous: Not harmful.

**innominate:** Not name; having no name.

**insertion:** The point at which a muscle is attached to the bone or fascia that it moves.

**inspection:** A careful visual examination of the patient, for the purpose of identifying any abnormality.

inspiration: Inhalation.

**insulation:** A nonconducting substance that offers a barrier to the passage of heat or electricity.

**insulin:** A hormone secreted by the islets of Langerhans in the pancreas; essential for the proper metabolism of blood sugar.

insulin shock: Not a true form of shock; hypoglycemia caused by excessive insulin dosage, characterized by sweating, tremor, anxiety, unusual behavior, vertigo, and diplopia; may cause death of brain cells.

**integument:** A covering or sheath; the skin.

intercostal: Between the ribs.

**intercostal muscles:** Muscles between the ribs.

intercostal space (ICS): The space between the ribs; identified by the number of the rib above that space, e.g., the first intercostal space is the space below the first rib, directly above the second rib.

interstitial fluid: The fluid bathing the cells; part of the extracellular fluid; continuous with the lymphatic fluid.

**intestine:** The portion of the alimentary canal extending from the pylorus to the anus.

large intestine: The portion of the digestive tube extending from the

ileocecal valve to the anus; composed of cecum, colon, and rectum; the large bowel. small intestine: The portion of the digestive tube between the stomach and the cecum; composed of the duodenum, the jejunum, and the ileum; the small bowel.

**intoxicate:** To poison; commonly, to cause diminished mental control by means of drugs, alcohol.

intracardiac injection: An injection of medication directly into the heart chamber through the thoracic and ventricular walls.

intracellular fluid: The portion of total body water contained within the cells.

intracerebral: Within the cerebrum.

**intracerebral hematoma:** An extravasation of blood within the brain.

intracranial: Within the skull.

intramuscular: Within the muscle.

intravascular fluid: The portion of the total body water contained within the blood vessels.

intravenous: Within or into a vein.

intravenous fluid: Sterile water containing additives such as electrolytes and/or sugar in various

combinations and concentrations for the purpose of administering to patients per venous infusion.

intrinsic: Of internal organs; innate.

intubation: An insertion of a tube into an organ that is connected to the outside of the body by means of a hollow tube; commonly, the insertion of a tube into the trachea or esophagus.

**inversion:** A turning inward, inside out, or upside down or other reversal of the normal reaction of a part.

**involuntary action:** An act performed independent of the will; not voluntary.

involuntary commitment: The commitment of a patient to a hospital for treatment or observation against the patient's will.

**involuntary muscle:** The muscles that act without voluntary control; smooth muscle.

**ipecac syrup:** A medication used to induce vomiting.

**iris:** The colored portion of the eye that surrounds the pupil.

**irritation:** The act of stimulating; undue sensitivity; slight or temporary disruption of tissues.

islets of Langerhans: The cluster of cells in the pancreas that produce insulin.

**isotonic:** A drug of the nitrate family isosorbide dinitrate) that acts as a vasodilator; used for angina pectoris; trade name: Isordil.

-itis: A suffix meaning inflammation.

IV: Abbreviation for intravenous.

J

**jaundice:** The presence of excessive bile pigments in the blood stream that give the skin, mucous membranes, and eyes a distinct yellow color.

jaw thrust maneuver: A procedure for opening the airway, wherein the jaw is lifted and pulled forward to keep the tongue from falling back into the airway.

**jejunum:** The second portion of the small intestine, between the duodenum and ileum.

joint: The point at which two or more bones articulate; commonly, portion of marijuana.

**joint capsule:** A fibrous sac that, with is synovial lining, encloses a joint.

jugular: Pertaining to the neck; large vein on either side of the neck, draining the head via its portion

named external jugular, or draining the brain via the internal jugular.

jump kit: A closed container fitted with necessary portable equipment and supplies to be used in the emergency care of patients who are treated away from ambulance.

**juxta-:** Prefix meaning near; close to; as in juxtaposition.

Κ

**keep open rate:** A very slow rate of IV infusion designed to keep the route open and not permit the line to clot; a rate of 25 milliliters per hour (American Heart Association).

**keratin:** The horny proteinlike substance in the upper layers of the skin that is also the principal constituent of the hair and nails.

**ketoacidosis:** A condition arising in diabetics where their insulin dose is insufficient to their needs; fat is metabolized, instead of sugar, to ketones; characterized by excessive thirst, urination, vomiting, and hyperventilation of the Kussmaul type.

**ketone:** A compound that is organic and derived by oxidation from a secondary alcohol; produced by metabolism without sugar.

**kidneys:** The paired organs located in the retroperitoneal cavities that filter blood and produce urine; also

act as adjuncts to keep a proper acidbase balance.

Kimmelstiel-Wilson syndrome: kidney failure.

Kussmaul's respiration: A deep, rapid respiration characteristic of hyperglycemia, or diabetic coma, caused by acidosis and the necessity of the body to blow off carbon dioxide as a compensatory mechanism.

L

labia: The lips; the folds of skin and mucous membranes that comprise the vulva.

**labor:** The muscular contractions of the uterus designed to expel the fetus from the mother.

lacerate: To tear or cut roughly.

**laceration:** A wound made by tearing or cutting of body tissues.

**lactation:** The period when the baby is nourished at the breast; the secretion of milk.

lactic acid: An organic acid normally present in tissue and produced in carbohydrate matter by bacterial fermentation; one of the acids produced by anaerobic metabolism, contributing to the acidosis produced in cardiac arrest.

lactic acidosis: An excessive amount of lactic acid in the blood causing a low blood pH.

ladder splint: A flexible splint consisting of two stout parallel wires and finer crosswires; resembles a ladder.

landline: A telephone line.

laparotomy: Incision in the abdominal wall; usually for the purpose of inspection of viscera for abnormalities.

laryngectomee: A person who has undergone a total or partial surgical removal of the larynx.

**laryngectomy:** The surgical removal of the larynx.

**laryngoscope:** An instrument used for directly visualizing the larynx and its related structures.

**laryngospasm:** A severe constriction of the vocal cords, often in response to allergy or noxious stimuli.

laryngotracheobronchitis: Croup; inflammation of the larynx, trachea, and bronchi.

**larynx:** The organ of voice production.

**lateral:** Of or toward the side; away from the midline of the body.

left heart failure: Failure of the left ventricle to effectively pump blood into the lungs as well as causing poop perfusion of brain, kidneys, and other parts of the body; pump failure; cardiogenic shock may be the outcome.

**leg:** The lower limb generally, specifically, that part of the lower limb extending from the knee to the ankle.

lens: The portion of the eye that focuses light rays onto the retina.

**lesion:** A distinct area of pathologically altered tissue; an injury or wound.

lethal: Fatal.

**lethargy:** A lack of activity; drowsiness; indifference.

leukemia: A disease of the bloodforming organs, characterized by proliferation of white blood cells and pathological changes in the bone marrow and other lymphoid tissue; cancer of the blood.

leukocyte: White blood cells.

**lidocaine:** A drug used to prevent or terminate life-threatening ventricular dysrhythmias by suppressing ventricular ectopic activity; trade name: Xylocaine.

life-threatening arrhythmia: Any arrhythmia that causes compromise

of the cardiac output, usually ventricular in origin but may be of atrial origin especially if the rate is either extremely slow or extremely rapid (less than 40 or more than 160 per minute.)

**ligament:** A tough band of fibrous tissue that connects bone to bone or that supports any organ.

**limb presentation:** A delivery in which the presenting part of a fetus is an arm or a leg.

**linear fracture:** A fracture running parallel to the long axis of the bone.

**linear skull fracture:** A skull fracture that runs in a straight line.

**lineman's glove:** A rubber-lined leather glove, especially designed not to conduct electricity.

**liniment:** A liquid drug for external use applied by using gentle friction; usually irritating to the tissue and by increasing blood flow in the area, reduces pain and stiffness.

**lipid:** Fat; any one of a group of fats that is insoluble in water but soluble in fat solvents.

**listless:** A condition characterized by a lack of inclination toward exertion.

litter: Stretcher.

liver: The large organ in the right upper quadrant of the abdomen that

secretes bile, produces many essential proteins, detoxifies many substances, and stores glycogen.

log roll: A method for placing a patient on a carrying device, usually a long spineboard or a flat litter; the patient is rolled on his side, then back on the litter.

**lotion:** Any liquid medicinal preparation intended for local application.

LSD: Lysergic acid diethylamide; a serotonic antagonist that induces schizophrenic-like states in humans, with hallucinations that are visual rather than auditory; may produce psychosis; used in the treatment of chronic alcoholism and psychotic disorders.

**lumbar:** Refers to the five vertebrae between the superiorly placed thoracic and inferiorly oriented sacral vertebrae.

**lungs:** The paired organs in the thorax that effect ventilation and oxygenation.

lye: A solution of alkaline salts obtained by the leaching of wood ashes.

lymph node: Any one of the round, oval, or bean-shaped bodies located along the course of the lymphatic vessels; producing lymphocytes and acting as filters for lymphatic system; when there is infection present, the

lymph nodes in the area swell and are detected more easily in the neck and groin.

lymphoid tissues: A threedimensional network of tissue found in the lymph nodes, spleen, thymus, adenoids, and tonsils that intercept and destroy pathogenic substances.

M

malaise: A general feeling of vague bodily discomfort.

malignant: Cancerous; tending to become progressively worse and resulting in death.

malingering: Willful, deliberate, and fraudulent feigning or exaggeration of the symptoms of illness or injury to attain a consciously desired end.

malleolus: The large, rounded bony protuberance on either side of the ankle joint.

malnutrition: Any disorder of nutrition; usually taken to mean too little nourishment.

mandible: The lower jawbone.

mania: Disordered mental state of extreme excitement.

manic-depressive: Marked by alternating periods of elation and depression.

manubrium: The upper portion of the sternum to which the clavicles and first two pairs of ribs are attached.

marrow cavity: The central cavity in the shaft of the long bone where yellow marrow is contained.

mastoid: A portion of the temporal bone that lies behind the ear, contains spongy bone tissue.

maxilla: The bone of the face that contains the alveoli of the upper teeth.

maxillary artery: The artery on both sides of the face that supplies blood to the face; palpable in front of the ear.

medulla oblongata: The portion of the brain between the cerebellum and spinal cord that contains the centers for control of respiration, heart beat, and other major control centers.

melanin: The pigment that gives skin its color.

melena: The passage of dark stools stained with blood pigment and digested blood; characteristically the stools are black and of a sticky, tarry consistency.

membrane: A thin sheet or layer of pliable tissue that serves as a covering or envelope of a part, or the lining of a cavity.

meninges: The three membranes covering the spinal cord and brain; the dura mater (external), arachnoid (middle), and pia mater (internal).

meningitis: An inflammation of the meninges; characterized by a stiff neck, fever, and delirium.

**menopause:** The point that marks the permanent cessation of menstrual activity.

menorrhagia: An excessive flow during a menstrual period.

menses: The normal periodic discharge of blood fluid from the uterus; menstruation.

menstrual flow: The regular discharge during menses consisting of blood and the shed endometrium (mucous membrane lining of the uterus).

**menstrual period:** The time period of the menstrual flow; usually from 3 to 7 days.

mescaline: The most active alkaloid present in the mescal cactus; produces effects similar to those produced by LSD, such as an alteration in mood, changes in perception, visual hallucinations, and an increase in body temperature and blood pressure.

**mesentery:** The tissues by which the intestines are connected to the back surfaces of the abdominal cavity.

metabolism: The conversion of food into energy and waste products.

metacarpal bones: The five cylindrical bones of the hand extending from the wrist to the fingers.

metatarsal bones: The five cylindrical bones of the foot extending from the ankles to the toes.

**methanol:** Methyl alcohol; wood alcohol; poisonous if ingested, causing extreme metabolic acidosis.

midclavicular line: An imaginary line beginning in the middle of the clavicle and running parallel to the sternum, passing medially to the male nipple line.

**Mickey:** Short for Mickey Finn; a knockout drug.

**middle ear:** The tympanic cavity and its ossicles.

Military Assistance to Traffic and Safety: A program using military helicopters and medical corpsmen as supplements to an existing local emergency medical service system to provide emergency assistance to civilian patients.

mineral acid: A strong acid, such as sulfuric, nitric, or hydrocholoric.

minute volume: The volume of air inhaled and exhaled during 1 minute;

calculated by multiplying tidal volume by respiratory rate.

miosis: An abnormal contraction of a pupil.

miscarriage: A lay term for the abortion or the premature expulsion of a nonliving fetus from the uterus.

**mitral valve:** A valve located between the left atrium and left ventricle.

mobile intensive care unit (MICU): A vehicle designed to provide specialized emergency care for serious conditions (such as cardiac damage or severe trauma).

molestation: A meddling or interference, often of a sexual nature.

monitor: To watch or listen to some transmission; the instrument which enables a person to watch or listen, such as a cardiac monitor.

**morbidity:** A synonym for illness; generally used to refer to an untoward effect of an illness or injury.

morphine: A narcotic analgesic used to relieve pain and anxiety; helpful in pulmonary edema because of its peripheral dilating effects.

mortality: Refers to death from a given disease or injury; generally thought of as a statistic to state the ratio of death to recovery.

motion sickness: A sensation induced by repetitive motion, characterized by nausea and lightheadedness.

motor nerves: The nerves that transport messages from the brain to various organs and muscles to stimulate involuntary and voluntary actions.

motor nerves: The nerves that transport messages from the brain to various organs and muscles to stimulate involuntary and voluntary actions.

**mottled:** Characterized by a patchy, discolored appearance.

**mouth gag:** A device for protecting the patient's tongue during a

convulsion, or for controlling the tongue during insertion of an artificial airway.

mouth-to-mouth ventilation: The preferred emergency method of artificial ventilation when adjuncts are not available.

mouth-to-nose ventilation: An emergency method of artificial ventilation when mouth-to-mouth cannot be used.

**mucus:** A viscid, slippery secretion that lubricates and protects various body structures.

multipara: A woman who has previously given birth.

**murmur:** A sound that may be detected in the heart when one of the valves is leaking or partially closed off.

muscle: A tissue composed of elongated cells that have the ability to contract when stimulated, thus causing bone and joints to move, or other anatomical structures to be drawn together.

muscle avulsion fracture: A tearing away of a part of bone, usually by a tendon, ligament, or capsule.

**musculature:** The muscular system of the body, or a part of the system.

musculoskeletal system: All the collective bones, joints, muscles, and tendons of the body.

myalgia: A tenderness or pain in the muscles.

myocardial: Pertaining to the musculature of the heart.

myocardial contusion: A bruise of the muscular tissue of the heart.

myocardial infarction: The damaging or death of an area of heart muscle resulting from a lack of blood supplying the area.

myocardial rupture: The breaking apart of a damaged portion of the myocardium, usually several days after the onset of acute myocardial infarction; causes bleeding into the pericardial space, cardiac tamponade, and death if untreated.

myocardium: The cardiac muscle.

N

**NAEMSP:** National Association of Emergency Medical Service Physicians

**nail bed:** The area of the corium on which the nail rests.

narcosis: An unconscious state produced by narcotics or accumulation of carbon dioxide in the blood, often accompanied by depression of the respiratory system and apnea.

**narcotic:** A drug used to depress the central nervous system, thereby relieving pain and producing sleep.

**nasal bone:** Elther of the two small oblong bones that together form the bridge of the nose.

nasal cannula: A small tubular prong that fits into the patient's nostril to provide supplemental oxygen; usually there are two, one for each nostril.

**nasopharynx:** The upper part of the pharynx above the level of the palate.

nausea: An unpleasant sensation, vaguely referred to the epigastrium and abdomen, often culminating in vomiting.

**neck:** The supporting structure of the head, formed by the seven cervical vertebrae, and lying between the head and shoulders.

**necrosis:** A death of an area of tissue, usually caused by the cessation of blood supply.

necrotic: Pertaining to dead tissue.

**neonate:** Newborn, up to age of 1

month.

**nerve:** A cordlike structure composed of a collection of fibers that convey impulses between a part of the central nervous system and some other region.

**nerve root:** One of two bundles of nerve fibers emerging from the spinal cord at each vertebra to join and form a spinal nerve.

**nervous system:** The brain, spinal cord, and nerve branches from the central, peripheral, and autonomic systems.

**neural:** Relating to any part of the nervous system.

**neurogenic:** Of or originating in the nervous system.

neurogenic shock: A shock caused by massive vasodilation and pooling of blood in the peripheral vessels to a degree that adequate perfusion cannot be maintained.

**neurological:** Of or relating to the branch of medical science dealing with the nervous system and its disorders.

**neurotic:** A term that refers to a person suffering disorders in thought processes that are not due to demonstrable disease of the central nervous system.

**neurotoxic:** Poisonous to nervous tissue.

**neutralize:** To render neutral; specifically, the chemical combinations of hydrogen and hydroxyl ions to form water, rendering each ion harmless.

NHTSA: National Highway
Transportation Safety Administration

nitrogen narcosis: A drugged condition created when the nitrogen in the body is exposed to great pressure, as in a deep dive; similar to alcoholic intoxication; the condition can cause divers to remove their breathing equipment while underwater; also called "rapture of the deep".

**nitroglycerin:** A drug used in the treatment of angina pectoris, usually taken under the tongue.

**nocturia:** The necessity to get up at night to urinate.

nondirecting question: An interview technique in which the paramedic asks open-ended questions in an attempt to calm the patient and gather information on the patient's problem.

**norepinephrine:** A hormone and drug used in the treatment of shock primarily for its alpha stimulating properties; causes vasoconstriction; trade name Levophed.

noxious: injurious.

**nystagmus:** Continuous rolling movement of the eyeball.

0

obese: Fat.

**oblique fracture:** A fracture that runs diagonally to the long axis of the bone.

obstruction: Blockage.

**occipital:** Pertaining to the back of the head.

**occlude:** To close off or stop up; obstruct.

**occlusion:** The act of closure or closing off; an obstruction.

occlusive dressing: A watertight dressing for a wound.

**ocular:** Pertaining to the eye.

**ointment:** A semisolid preparation for external application to the body usually containing a medicinal substance.

OJT: On-the-job training.

olfactory nerve: Cranial nerve number one; the nerve that transmits smell impulses to the brain; passes through the cribriform plate of the ethmoid bone.

**open fracture or dislocation:** A fracture or dislocation exposed to the

exterior; an open wound lies over the fracture or dislocation.

open pneumothorax: A pneumothorax caused by an opening in the chest wall; a sucking chest wound.

**open wound:** A wound in which the affected tissues are exposed by an external opening.

**opiate:** Technically, one of several alkaloids derived from the opium poppy plant.

**optic nerve:** Cranial nerve number two; the nerve that transmits visual impulses from the eye to the brain.

oral: Pertaining to the mouth.

**orbits:** The bony, pyramid-shaped cavities in the skull that hold the eyeballs.

**orifice:** The entrance to, or outlet of any body cavity.

oropharyngeal airway: The respiratory adjunct placed in the patient's upper airway so that the distal part lies behind the base of the tongue and holds the tongue forward, preventing occlusion of the airway.

oropharynx: The area behind the base of the tongue that lies between the soft palate and upper portion of the epiglottis.

**orthopnea:** A severe shortness of breathing or difficulty in breathing when lying down; relieved by placing the patient in a sitting position.

**-otomy:** A suffix meaning surgical incision into an organ, as in tracheotomy.

ovary: The fermale gonad in which eggs and female hormones are produced.

**overhydration:** A condition that results from excessive retention of fluids; circulatory overload.

**overreaction:** Overly intense reaction or response to a stimulus.

ovum: Egg.

oxygen: A colorless, odorless, tasteless gas essential to life and comprising 21 percent of the atmosphere; chemical formula:  $O_2$ .

**oxygen drive:** The stimulus to breathe when the arterial level of oxygen in the blood is low.

oxygen mask: A device that fits over a patient's nose and mouth to permit breathing of oxygen which is fed into it.

oxygen toxicity: An unusual condition caused by excessive concentration of oxygen in inspired air, resulting in damage to lung tissue: IT IS VERY SELDOM SEEN IN EMERGENCY WORK.

P

pacemaker: The specialized tissue within the heart that initiates stimuli; also an artificial device used to stimulate the heart to beat when the electrical conduction system of the heart is malfunctioning.

pager: A pocket-sized radio receiver that provides one-way communication; used to locate or inform individuals within a limited area.

palate: The roof of the mouth.

pallor: A paleness of the skin.

**palpate:** To examine by feeling and pressing with the palms and the fingers.

palpitation: A sensation felt under the left breast when the heart "skips a beat" caused by premature ventricular contractions.

palsy: A paralysis.

pancreas: An intra-abdominal gland that secretes insulin and important digestive juices.

pancreatitis: An inflammation of the pancreas.

**papule:** A small, circumscribed, solid elevation of the skin.

paradoxical movement: The motion of an injured section of a flail chest; opposite to the normal movement of the chest wall.

paralysis: Loss or impairment of motor function of a part due to a lesion of the neural or muscular mechanism.

paranoia: A mental disorder characterized by abnormal suspicions or other delusions, often of persecution or grandeur.

paraplegia: The loss of both sensation and motion in the legs and lower parts of the body; most commonly due to damage of the spinal cord.

**parasite:** An animal or vegetable organism that lives on or in another organism.

parasympathetic nervous system: A subdivision of the autonomic nervous system involved in control of the involuntary functions; restores the body to normality after stimulus.

paresis: Incomplete or partial paralysis.

paresthesia: An abnormal skin sensation, often of the pins-and-

needles variety, indicating a disturbance in nerve function.

parietal area: Pertaining to or forming any wall of a cavity.

parietal lobe: The upper control lobe of the cerebrum; pertaining to or located near the parietal bone of the skull.

parietal pleura: A serous membrane that lines the inside of the chest wall and the pericardium.

**paroxysm:** A spasm; a sudden, intense periodic attack, or recurrence of symptoms.

parturition: The act of giving birth.

**patch:** A connection of a telephone line or circuit that serves several parties or locations.

**patella:** A small, flat bone that protects the knee joint; the kneecap.

pathogenic: Capable of causing a disease process.

pathognomonic: A sign or symptoms that is sufficiently characteristic of a disease process as to make possible a diagnosis on the basis of that finding alone.

**pathologic:** Indicative of or caused by disease.

pathological fracture: A fracture in which a specific weakness or

destruction of the bone, caused by a certain process, such as cancer, is the reason for the break.

pediatrics: The medical specialty devoted to the diagnosis and treatment of diseases of children.

pelvic cavity: The lowermost portion of the abdominal cavity containing the rectum, urinary bladder, and, in the female, the internal sex organs.

pelvic girdle: The large, bony structure supporting the abdominal and pelvic organs; made up of two ossa innominata.

pelvis: See pelvic girdle.

**penetrate:** To pierce; the pass into the deeper tissues or into a cavity.

**penis:** The male organ of urinary discharge and copulation.

peptic ulcer: An ulcer produced by the action of acid, pepsin, gastric juice in the stomach, lower esophagus, and proximal duodenum.

percussion: The act of tapping a part of the body; used as an aid in diagnosing the condition of underlying body structures by the sound obtained by tapping with the fingers.

percutaneous: Through the skin.

**perfusion:** The act of pouring through or into; the blood getting to

the cells in order to exchange gases, nutrients, etc., with the cells.

pericardial cavity: The space or sac formed by the two layers of the pericardium, the outer parietal pericardium, and the inner visceral pericardium.

pericardium: The double-layered sacholding the heart and the origins of the superior vena cava and pulmonary artery.

**perineum:** The region between the genitals and the anus.

**peripheral:** Pertaining to the outside; that which is situated away from the center part.

peripheral nervous system: The portion of the nervous system consisting of the nerves and ganglia outside the brain and the spinal column.

peripheral vasoconstriction: The constriction of blood vessels causing a increase in blood pressure.

peripheral vasodilation: The dilation of blood vessels causing a decrease in blood pressure.

**peritoneal cavity:** The abdominal cavity.

**peritoneum:** The serous membrane lining the abdominal cavity.

**petechia:** A minute red spot due to escape of a small amount of blood within the skin.

petit mal seizure: A type of epileptic attack, characterized by a momentary loss of awareness but not accompanied by loss of motor tone.

-phagia: Suffix meaning to swallow, to eat, to ingest.

**phalanx:** Any bone of the finger or toe

**pharynx:** The portion of the airway between the nasal cavity and the larynx.

phenobarbital: One of the barbiturates; a hypnotic-sedative.

phlebitis: An inflammation of the wall of a vein manifested by tenderness, redness, and a slight edema along part of the length of the vein.

**phobia:** An abnormal and persistent fear of a specific object or situation.

**-phonia:** Suffix or prefix having to do with speech or sounds.

physical dependence: Habituation or use of a drug, or other maneuver, because of its physiologic support, and because of the undesirable effects of withdrawal.

**pigment:** A coloring matter of dyestuff.

pituitary gland: The master gland of the body, located in the brain behind the eyes; influences the secretion of all other glands.

placenta: A vascular organ attached to the uterine wall that supplies oxygen and nutrients to the fetus; also called the afterbirth.

**plantar:** Refers to the sole of the foot.

plasma: The fluid portion of the blood, retains the clotting factors, but has no red or white cells.

**platelet:** A small cellular element in the blood that assists in blood clotting.

pleura: A continuous serous membrane that lines the outer surfaces of the lungs and the internal surface of the thoracic cavity.

pleuritic pain: A sharp chest pain that is made worse by deep breathing, coughing, or laughing; characteristic of pleuritis.

pleuritis: Inflammation of the pleura.

**-pnea:** Suffix for respiration, breathing.

pneumo-: Prefix for air or gas; lung.

pneumonia: An acute infectious disease of the lungs; causes an effusion.

pneumothorax: An accumulation of air in the pleural cavity, usually entering after a wound or injury that causes a penetration of the chest wall or laceration of the lung.

**poly-:** Prefix meaning many or much.

**polydipsia:** A condition of excessive thirst.

**polyphagia:** A condition of excessive hunger.

**polyuria:** A condition of excessive urination.

**posterior:** Situated in the back of or behind a surface.

**post ictal:** Refers to the period after the convulsive stage of a seizure.

**postmortem:** After death; commonly, the detailed examination of a body after death, to determine the cause of death.

postpartum: After childbirth.

preinfarction angina: An unstable angina.

prenatal: Before birth.

**presenting part:** The part of the baby that emerges first during delivery.

pressure dressing: A dressing with which enough pressure is applied over a wound site to stop bleeding.

pressure splints: An inflatable plastic circumferential splint that can be applied to an extremity and inflated to achieve stability after a fracture.

**primipara:** A woman who is about to give birth to a baby for the first time.

**prognosis:** A probable outcome of a disease based on assumptive knowledge.

**prolapse:** To fall out or slip down; usually refers to an organ or other body part.

**prolapsed cord:** A delivery in which the umbilical cord appears at the vaginal opening before the head of the infant.

**pronation:** The act of assuming the prone position; placing or lying face downward; turning the hand palm down.

**prone:** A position of lying face down.

**prophylaxis:** A method for taking measure to prevent the occurrence of a given disease or abnormal state.

**prostate:** A gland at the base of the male bladder that often becomes enlarged later in life and causes an obstruction of urine flow.

**prosthesis:** An artificial part made to replace a natural one.

prostration: A collapse.

psychogenic shock: A fainting spell as a result of transient generalized cerebral ischemia; not a true shock condition.

psychological dependence:

Dependence of a drug, or other therapeutic maneuvers, because of its support to the patient's psyche, rather than to his physiologic function.

**psychosis:** A mental disorder characterized by a disintegration of personality and loss of contact with reality.

**psychosomatic:** An indication of an illness in which some part of the cause is related to emotional factors.

pubic symphysis: The joint formed by union of bodies of the pubic bones in the midsagittal plane, characterized by a thick mass of fibrocartilage.

**pulmonary:** Pertaining to the lungs or related structures.

**pulmonary alveoli:** The air sacs of the lungs.

**pulmonary artery:** The major artery leading from the right ventricle to the lungs.

pulmonary circulation: The passage of blood from the right ventricle through the pulmonary artery and all of its branches and capillaries in the lungs, and then back to the left atrium through the pulmonary veins.

**pulmonary contusion:** A bruise of the pulmonary tissue.

pulmonary edema: The condition of the lungs when the pulmonary alveoli are filled with exudate and foam; usually secondary to left heart failure.

**pulmonary embolism:** Obstruction of the pulmonary arteries by emboli of any foreign material in the venous system.

pulmonary resuscitation: A technique providing artificial ventilation, through mouth to mouth, mouth to nose, or using any of the airway adjuncts.

pulmonary valve: The valve between the right ventricle and the pulmonary artery.

pulmonary veins: The veins that carry oxygenated blood from the lungs to the left atrium.

**pulse:** The rhythmic expansion and contraction of an arterial wall caused by ventricular systole and diastole.

**pulse deficit:** The difference in heart rate between apical rate and the rate obtained by palpating a peripheral artery.

**pulse rate:** The heart rate determined by counting the number of pulsations occurring in any superficial artery.

**pump failure:** A partial or total failure of the heart to pump blood effectively; causes cardiogenic shock.

**pupil:** The small opening in the center of the iris.

pupillary: Pertaining to the pupil.

Q

**quadrant:** One of the four quarters of the abdomen.

quadriplegia: A paralysis of both arms and legs.

R

raccoon sign: Bilateral symmetrical periorbital ecchymoses seen with basal skull fractures; also called coon's eyes.

Pertaining to the radial bone of the arm.

radiation: The process of emitting energy in a particulate or wave form.

radiation sickness: The condition that follows excessive irradiation from any source.

radius: The bone on the thumb side of the forearm.

rales: An abnormal breath sound produced by the flow of air through bronchi and bronchioles when they are constricted by spasm or filled by secretions.

rape: Sexual intercourse by force.

rash: An eruption of the skin, either localized or generalized.

**rectum:** The distal portion of the large intestine.

red blood cell: An erythrocyte; the cell that carries oxygen from alveoli to cell.

reflex: An involuntary muscular action in response to stimulation.

reflex action: An automatic reaction to a stimulus such as pulling one's hand away from something hot.

**regurgitation:** A backward flowing, as the casting up of undigested food from the stomach to the mouth.

renal: Pertaining to the kidney.

**rescue:** The freeing of persons from threatening or dangerous situations by prompt and vigorous action.

**heavy rescue:** A rescue activity that involves the use of complicated tools, equipment, and procedures.

**light rescue:** A rescue activity using simple means and a minimum of equipment.

**respiration:** The act of breathing; the exchange of oxygen and carbon dioxide in the tissues, lung.

internal respiration: The exchange of oxygen and carbon dioxide at the cellular level. external respiration: The exchange of oxygen and carbon dioxide between the alveoli and blood in the lungs.

**respiratory arrest:** The cessation of breathing.

respiratory failure: A failure of the respiratory system to maintain an oxygen pressure greater than 60 torr and a carbon dioxide pressure of less than 50 torr.

respiratory system: A system of organs that controls the inspiration of oxygen and the expiration of carbon dioxide.

response time: The length of time required for the emergency medical services team to arrive at the scene of an emergency after receiving a call for help.

**resuscitation:** The act of reviving an unconscious patient.

retina: The lining of the back of the eye that receives visual image and transmits them via the optic nerve to the brain.

**retro-:** The prefix meaning located behind.

retrograde amnesia: An amnesia for events that occurred before a traumatic events or before the disease that caused the condition.

**retyrosternal:** Situated or occurring behind the sternum.

**rhonchi:** Coarse rattling sounds somewhat like snoring, usually caused by secretions in the bronchial tubes.

**rib:** One of the 24 bones forming the thoracic cavity wall.

**rib cage:** The skeletal framework of the chest; composed of the sternum, the ribs, and the thoracic vertebrae.

right heart failure: The failure of the right ventricle to pump blood effectively, causing backup of blood into the systemic veins, with consequent edema of body tissues.

rigid splint: A splint made of a firm material that can be applied to an injured extremity to prevent motion at the site of a fracture or dislocation.

**Robinson stretcher:** Split frame stretcher.

**roller dressing:** A strip of rolled-up material used for dressings.

rotation: The turning or movement of a body around its axis.

**rupture:** A tear or dissolution of continuity; a break of any organ or tissue.

S

s: Abbreviation for sine; without.

sacral: Pertaining to the sacrum, which is the fused bone of the five sacral vertebrae, part of the pelvic girdle.

sacroiliac joint: Left and right joining of the sacrum and ilia.

sacrum: The part of the lower spine made up of the five fused sacral vertebrae.

saline: Containing salt.

saline solution: A solution of any salt, but usually refers to a solution of sodium chloride.

saliva: The clear, alkaline fluid secreted by the salivary glands.

salivary glands: The glands that produce and secrete saliva, connected to the mouth by ducts.

salivation: An excess secretion of saliva.

scab: A crust formed by the coagulation of blood, pus, serum, or any combination of these on the surface of an ulcer, erosion, abrasion, or any other type of wound.

scapula: The shoulder blade.

scapular spine: The prominent triangular ridge on the dorsal aspect of the scapula.

sciatic nerve: A major collection of nerve fibers arising from the lumbosacral plexus and subserving most sensation of the lower extremity and motion of the leg and foot.

sclera: The white, opaque, outer layer of the eyeball.

scrotum: A pouch of thickened skin hanging at the base of the penis in the midline; contains the testes and their accessory ducts and vessels.

**seal bark:** A characteristic hoarse, barking cough heard in croup.

second degree burn: A burn penetrating beneath the superficial skin layers, producing edema and blisters.

**sedative:** A drug that depresses the activity of the central nervous system; has a calming effect.

**seizure:** A sudden attack or recurrence of a disease; a convulsion; an attack of epilepsy.

semiconscious: Stuporous; partially conscious.

seminal duct: The duct through which sperm pass into the seminal vesicles.

seminal vesicles: Either of the paired, sacculated pouches attached to the posterior past of the urinary bladder in the male; the duct of each joins the ductus deferens of the same side to form the ejaculatory duct.

**senile:** Pertaining to old age; implies loss of mental ability.

**sense:** Any one of the faculties by which the conditions or properties of things are perceived.

sensory nerves: The nerves that conduct impulses from various sense modalities through the spinal cord to the brain.

sepsis: The presence in the blood or other tissues of pathogenic microorganisms or their toxins.

**septum:** A dividing wall or partition, usually separating two cavities.

**serum:** The liquid portion of the blood containing all of the dissolved constituents except those used for clotting.

**shivering:** A trembling from cold or fear; produces heat by muscular contractions.

shock: A state of inadequate tissue perfusion that may be a result of pump failure (cardiogenic shock), volume loss or sequestration (hypovolemic shock), vasodilation (neurogenic shock), or any combination of these.

anaphylactic shock: A rapidly occurring state of collapse caused by hypersensitivity to drugs or other foreign materials (insect venom, certain foods, inhaled allergenic); symptoms may include hives, wheezing, tissue edema, bronchospasm, vascular collapse.

**septic shock:** A shock developing in the presence of, and as a result of, severe infection.

shoulder joint: A ball and socket joint between the head of the humerus and the glenoid fossa of the scapula.

**SIDS:** Abbreviation for sudden infant death syndrome.

sign: Any objective evidence of physical manifestation of a disease.

silent acute myocardial infarction: An acute myocardial infarction not accompanied by pain.

simple fracture: A fracture that is not compound; the skin is not broken over the break in the bone.

sinus: A general term for a hollow space, such as a channel for venous blood in the cranium or an air cavity in one of the facial bones.

six man stretcher pass: A method of transporting a patient on a litter over rough terrain; consists of passing a stretch by six persons in two parallel rows, the last two persons in each row moving ahead each time as the stretcher passes them.

**skeletal muscle:** The hard, bony structure that forms the main support of the body.

skin: The outer integument or covering of the body, consisting of the dermis and the epidermis; the largest organ of the body; contains various sensory and regulatory mechanisms.

**skull:** The bony structure surrounding the brain; consists of the cranial bones, facial bones, and the teeth.

sling: A triangular bandage applied around the neck to support an injured upper extremity; any wide or narrow material long enough to suspend an upper extremity by passing the material around the neck; used to support and protect an injury of the arm, shoulder, or clavicle.

sling and swathe: A bandage in which the arm is placed in a sling and is bound to the body by another bandage placed around the chest and arm to hold the arm close to the body.

**slough:** To cast of tissue, usually necrotic, separating from living tissue.

small intestine: The portion of the intestine between the stomach and colon.

sniffing position: The position for endotracheal intubation with the neck flexed and the head extended.

**snowblindness:** Obscured vision caused by sunlight reflected off snow.

**socket:** A hollow in a joint or other part into which corresponding organ or part fits.

soft tissue: The nonbony and noncartilaginous tissue of the body.

**sporific:** Producing deep sleep; usually considered a characteristic of a drug.

spasm: A sudden, violent, involuntary contraction of a muscle, or group of muscles, attended by pain and interference with function; a sudden but transitory constriction of a passage, canal, or orifice.

**sphincter:** A muscle that encircles a duct, tube, or opening in such a way that its contraction constricts the opening.

**spinal canal:** The tunnel through which the spinal cord passes.

**spineboard:** A wooden or metal device primarily used for extrication and transportation of patients with actual or suspected spinal injuries.

spiral fracture: A fracture in which the line of break runs diagonally around the long axis of the bone.

spirits: A preparation of volatile substances dissolved in alcohol.

**spleen:** The largest lymphatic organ of the body; located in the left upper quadrant of the abdomen.

spontaneous pneumothorax: A rupture of the lung parenchyma resulting in the accumulation of air in the pleural space without trauma.

**sprain:** A trauma to a joint causing injury to the ligaments.

**sputum:** Expectorated matter, especially mucus or matter resulting from diseases of the air passages.

**status asthmaticus:** A severe, prolonged asthmatic attack that cannot be broken with epinephrine.

status epilepticus: The occurrence of two or more seizures without a period of complete consciousness between them.

**sterile:** Free from living organisms, such as bacteria.

**sterilize:** To render sterile or free from bacterial contamination; to make an organism unable to reproduce.

sternum: The long, flat bone located in the midline in the anterior part of the thoracic cage; articulates above with the clavicles and along the sides with the cartilages of the first seven ribs.

stillbirth: The birth of a dead fetus.

**stimulant:** Any agent that increases the level of bodily activity.

**stomach:** The hollow digestive organ in the epigastrium that receives food from the esophagus.

**stool:** Feces; the matter discharged at defecation.

stove-in chest: See flail chest.

straddle load: A method for placing a patient on a long spineboard by straddling both board and patient and sliding the patient on the board.

strain: An injury to a muscle caused by a violent contraction or an excessive forcible stretching.

**stress:** Any chemical, physical, or emotional factor that causes mental or bodily tension; may be a cause of disease.

stretcher: A carrying device that enables two or more persons to lift and carry a patient who is lying down.

ambulance stretcher: A carrying device used to transport patients to, from, or in an ambulance; usually wheeled but also portable. army stretcher: A folding carrying device made of wooden poles and covered with canvas with short, folding legs.

basket stretcher: A litter designed for the removal of patients over rough terrain or from heights; consists of an oblong plastic shell with low sides.

split-frame stretcher: A litter that can be divided longitudinally, slipped beneath the patient from each side, and locked at each end, providing an extrication as well as a transport device.

stricture: The narrowing of a duct or any natural passage by an inflammatory process, trauma, fibrosis, muscular spasm, or pressure from adjacent structures.

**stridor:** A harsh, high-pitched respiratory sound associated with sever upper airway obstruction.

**stroke:** A cerebrovascular accident of sudden onset.

**stupor:** A state of reduced sensitivity; mental confusion.

**subdural:** Refers to any lesion in the brain that occurs beneath the dura.

subdural hematoma: A collection of blood or clot between the dura mater and arachnoid usually caused by a laceration or rupture of a meningeal blood vessel.

sublingual: Under the tongue.

**substernal:** Beneath the sternum; retrosternal.

**subtrochanteric area:** The area below any trochanter.

sucking chest wound: An open pneumothorax.

sudden infant death syndrome (SIDS): A sudden, unexpected death of an infant within the first six months of life, crib death.

**suffocate:** To impede respiration, to asphyxiate.

suicide: The act of deliberately taking one's own life.

**sunstroke:** A form of heatstroke due to prolonged sun exposure.

**superficial:** Confined to or pertaining to the surface.

**superior:** In anatomy, used to refer to an organ or part that is located above another organ or part.

superior vena cava: One of the two largest veins in the body that empties venous blood into the right atrium; receives blood from the upper extremities head and neck.

**supinate:** To turn the forearm so that the palm faces upward.

**supine:** Lying horizontal in a face-upward position.

**suppository:** A drug mixed in a firm base that melts at body temperature, shaped to fit various body orifices;

such as the rectum, urethra and vagina.

**suppuration:** Formation or discharge of pus.

**surgery:** The branch of medicine that deals with trauma and diseases that requires operative intervention.

suture: A type of fibrous joint in which the opposed surfaces are closely united; also, the material used in closing a surgical wound, or repairing a gaping wound.

**swathe:** A cravat tied around the body to decrease movement of a part.

**sweat gland:** A gland that secretes water and electrolytes through the skin.

sympathetic nervous system: A subdivision of the autonomic nervous system that governs the body's reaction to stresses by stimulating the heart, bronchodilation, and other reactions.

**symptom:** A subjective sensation or awareness of disturbance of bodily function.

**syncope:** Fainting; a brief period of unconsciousness.

**syndrome:** A complex of symptoms and signs characteristic of a condition.

**systemic:** Refers to anything that affects the body as a whole.

systemic circulation: The passage of blood from the left ventricle through the aorta and all of its branches and capillaries and back to the right atrium through the venules, veins, and venae cavae.

T

**tachyrhythmia:** A rapid heart rate, over 120 to 160 per minute.

tachycardia: Abnormally rapid heart rate, over 100 beats per minute.

**tachypnea:** Excessively rapid rate of respiration, over 25 per minute in adults.

**tarsal:** Pertaining to the tarsus, the ankle.

temperature: The degree of heat of a living body; varies in cold-blooded animals with environmental temperature and is constant, with a narrow range, for warm-blooded animals; 98.6 degrees Fahrenheit oral temperature and 99.6 degrees rectal are considered normal for humans.

**temple:** The portion of the head above and anterior to the ears and above the zygomatic arch.

temporal artery: The artery located on either side of the face above and in front of the upper portion of the ear; supplies blood to the scalp.

**temporal lobe:** A region of the cerebral hemisphere below and lateral to the frontal and occipital lobes; contains the control center for speech.

temporomandibular joint (TM joint): Mandibular joint, the articulation between the head of the mandible and the mandibular fossa and articular tubercle of the temporal bone.

**tendon:** A tough band of dense, fibrous, connective tissue that attaches muscles to bone and other parts.

tension pneumothorax: A situation in which air enters the pleural space through a defective one-way valve in the lung causing progressive increase in intrapleural pressure, with lung collapse and impairment of circulation.

**testes:** The male reproductive glands that produce spermatozoa.

tetanus: An infectious disease caused by an exotoxin of a bacteria, Clostridium tetani, that is usually introduced through a wound, characterized by extreme body rigidity and spasms, trismus, or opisthotonos, of voluntary body muscles.

**thalamus:** Either one or two grey matter masses situated on either side of the third ventricle near the brain stem; all sensory stimuli except

olfactory, are received, synthesized, associated, and relayed to specific cortical areas of the brain.

thermal: Pertaining to heat.

**thigh:** The portion of the lower extremity between the hip and knee.

third degree burn: A full-thickness burn destroying all skin layers and underlying tissues; has a charred or white, leathery appearance; insensitive.

Thomas splint: A rigid metal or plastic splint that provides support for a steady longitudinal pull on the lower extremity.

thoracic: Pertaining to the chest.

thoracic cage: The rib cage.

thoracic cavity: The space within the chest walls between the diaphragm and the base of the neck.

thoracic spine: The vertebrae, usually 12 in number, between the cervical spine and the lumbar spine.

**thorax:** The portion of the trunk between the neck and the diaphragm, encased by the ribs; chest.

thready pulse: A pulse that is weak or scarcely audible, characteristic of a person in shock.

three-man lift: A method by which a number of persons may lift and move a patient smoothly.

three-point suspension: The distribution of weight of a patient while the patient is being moved; trunk, buttocks, and legs are separately supported.

thyroid cartilage: The largest of the laryngeal cartilages, the Adam's apple.

thyroid gland: A ductless endocrine gland lying in front of the trachea; produces hormones involved in metabolism regulation.

**tibia:** The larger of the two bones in the leg; the shin bone.

tic: An involuntary spasmodic twitching, usually of the face.

**tinnitus:** A ringing, tinkling, buzzing, or roaring noise in the ears.

tissue: An aggregation of similarly specialized cells and their intercellular substance united in the performance of a particular function.

tolerance: The state of enduring, or of less susceptibility to the effects of a drug or poison after repeated doses.

torsion: Twisting.

**tourniquet:** A constrictive device used on the extremities to impede venous blood return to the heart or obstruct arterial blood flow to the extremities.

toxemia: A condition wherein the blood contains poisonous products manufactured by body cells or microorganisms.

toxemia of pregnancy: A condition sometimes occurring during the second half of pregnancy manifested by symptoms of eclampsia.

toxin: Any poison manufactured by plant or animal life.

**toxoid:** A chemically modified toxin that, when injected, stimulates the development of immunity to a specific disease.

trachea: The cartilaginous tube extending from the larynx to its division into the primary bronchi; windpipe.

**tracheostomy tube:** A tube inserted into an opening made by a tracheotomy.

**traction:** The act of exerting a pulling force.

**trade name:** The name under which a drug is marketed by a given manufacturer; also referred to as the brand or proprietary name.

**transfusion:** An injection of blood, saline solution, or other liquid into a vein.

transverse colon: The division of the large intestine that crosses the abdomen, located between the ascending colon and the descending colon.

**transverse fracture:** A fracture in which the line of break forms a right angle to the axis of the bone.

#### trauma:

Surgical definition: physical injury.

Psychiatric definition: emotional distress, relating to a specific incident.

traumatic asphyxia: A syndrome resulting from a very severe compression injury of the chest; cyanosis of the face and neck, bulging of the eyes, and a flail chest are external results.

**tremor:** An involuntary trembling or quivering of voluntary muscles.

**trench foot:** A foot condition caused by exposure to cold and dampness.

**triage:** A system used for sorting patients to determine the order in which they will receive medical attention.

**triangular bandage:** A piece of cloth cut in the shape of a right-handed triangle; used as a sling, or folded for a cravat bandage.

**trunk:** The body, excluding the head and limbs; torso.

tympanic membrane: The eardrum.

U

**ulcer:** An open lesion of the skin or mucous membrane.

ulna: The larger bone of the forearm, on the side opposite that of the thumb.

umbilical cord: A flexible structure connecting the fetus to the placenta.

umbilicus: The naval.

unconscious: Without awareness, the state of being comatose.

universal dressing: A large (9 by 36 inches) dressing of multilayered material that can be used open, folded, or rolled to cover most wounds, to pad splints, or to form a cervical collar.

**ureter:** Either of the tubes that convey urine from the kidneys to the bladder.

**urethra:** The canal that leads urine from the bladder to the urethral orifice.

**urine:** The fluid secreted from the blood by the kidneys, stored in the bladder, and discharged through the kidneys.

urticaria: Hives.

uterus: The muscular organ that holds and nourishes the fetus, opening into the vagina through the cervix; the womb.

#### V

vagina: The canal in the female extending from the uterus to the vulva; the birth canal.

**vascular:** Relating to, or containing blood vessels.

**vasoconstriction:** The narrowing of the diameter of a blood vessel.

vasoconstrictor: A drug, nerve, hormone, or other agent that narrows the diameter of blood vessels.

vasodilator: A drug, nerve, hormone, or other substance that dilates or widens the diameter of blood vessels.

vasovagal attack: A syndrome consisting of hypertension, sweating, anxiety, nausea, and occasionally, syncope.

**VD:** Abbreviation for venereal disease.

**vein:** Any blood vessel that carries blood from the tissues to the heart.

femoral vein: A continuation of the popliteal vein that becomes the external iliac vein, the major vein draining the leg.

pulmonary vein: One of four veins that returns aerated blood from the lungs to the left atrium of the heart.

venae cavae: The two largest veins of the body returning blood to the right atrium.

inferior vena cava: Principal vein returning blood from the lower portion of the body. superior vena cava: Principal

vein returning blood from the upper portion of the body.

venereal disease: A disease generally acquired through sexual intercourse with an infected partner; syphilis, gonorrhea, and chancroid are common ones; Herpes II is becoming epidemic.

**venom:** A poison, usually derived from reptiles or insects.

venous blood: Unoxygenated blood, containing hemoglobin in the carboxyhemoglobin state.

**ventilation:** Breathing; supplying fresh air to the lungs.

**ventral:** Referring to the abdomen; directed toward or situated on the belly surface; opposite of dorsal.

ventricles: The thick-walled, muscular chambers in the heart that receive blood from the atrium and force blood into the arteries; also any small cavities; cerebral chambers containing cerebrospinal fluid.

left ventricle: The greater chamber, on the left side of the heart, that propels oxygenated blood through the aorta. right ventricle: The lesser chamber, on the right side of the heart that propels unoxygenated blood through the pulmonary artery and into the lungs. right and left, third and fourth ventricles: cerebral ventricles.

ventricular aneurysm: A localized dilation or ballooning of the wall of the ventricle, usually the left.

ventricular fibrillation: A rapid, tremulous, and ineffectual contraction of the cardiac myofibrils, producing no cardiac output; cardiac arrest.

ventricular standstill: Asystole; no muscular contraction of the ventricles.

ventricular tachycardia: A serious cardiac arrhythmia with rapid, regular, or slight irregular, ventricular contractions; AV dissociation is present, and often there is no cardiac output.

**Venturi mask:** A brand of breathing unit that has a graduated valve for setting a specific concentration of oxygen delivered through the mask.

venule: A very small vein.

**vertebra:** Any one of the 33 bones of the spinal column.

cervical vertebrae: The upper seven vertebrae, forming the skeleton of the neck.

coccygeal vertebrae: The three to five lower rudimentary vertebrae column that form the coccyx or tail bone.

**lumbar vertebrae:** The five fused vertebrae of the vertebral column that form the sacrum, a part of the pelvic girdle.

thoracic vertebrae: The 12 vertebrae of the vertebral column between the cervical vertebrae and the lumbar vertebrae.

vertebral: Pertaining to the vertebrae.

vertebral arch: The posterior projection of each vertebra through which the spinal cord passes.

vertebral body: The round solid bone forming the front part of the vertebra; articulates with the cartilaginous pads between the vertebrae.

**vertebral spine:** The body projection dorsal to the arch; the spinous process of the vertebra.

vertigo: A dizziness; an hallucination of movement; a sensation as if the external world is spinning; may be right or left, upward or downward.

vestigial: Pertaining to a small or imperfectly developed body part or organ that remains from one more fully developed in an earlier stage of the individual, or in the past generations, or in closely related forms.

viable: Living; capable of living.

vial: A small glass container.

viscera: The internal organs of the body.

vital signs: The indication of life through values that reflect mental status, blood pressure, pulse rate, and respiration rate and depth.

vocal cords: Either of two pairs of folds of mucous membrane in the larynx that project into the cavity of the larynx; activated by the passing of air over the folds, causing vibration; source of the voice sound.

voice box: The larynx.

**voluntary:** Of, relating to, or acting under obedience to the will.

**voluntary commitment:** The commitment of a patient to a hospital for treatment or observation with the patient's consent.

**voluntary muscle:** Any muscle that functions under the control of the will.

**vomiting:** The matter ejected from the stomach by vomiting.

vulva: The external parts of the female genitalia.

W

warning lights: The flashing lights that serve as a signal on an ambulance or other emergency vehicles.

warning signal: An intermittent audible signal of varying tones made by a siren to clear the way for an emergency vehicle; used when going on a call.

wheal: A swelling of the skin, produced by a sting, an injection, external force, or internal reaction.

wheeze: A high-pitched, whistling sound characterizing an obstruction or spasm of the lower airways.

wheezing: Breathing noisily and with difficulty.

wind-chill factor: The relationship of wind velocity and temperature in determining the effect of the factor on a living organism.

windpipe: The trachea.

white blood cells: Leukocyte; cellular element of the blood that produces antibodies and participates in the inflammatory responses.

withdrawal: A symptom produced by abstinence from a drug to which one is addicted, or has been taking.

womb: The uterus.

wrecking bar: A short, metal crowbar with a slight bend at one end for prying and claw for pulling nails at the other end; used to remove victims trapped in vehicles.

wrist: The joint or the region of the joint between the forearm and the hand.

X

**X-ray:** Electromagnetic radiation; roentgen ray.

**Xylocaine:** Trade name for lidocaine, a local anesthetic; and a depressor of cardiac premature ventricular beats.



U.S. Department of Transportation

National Highway Traffic Safety Administration